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Market orientation and innovation in U.S. small business firms in small towns

by

Yun-Jung Choi

**A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY**

Major: Textiles and Clothing

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2002

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ABSTRACT

The study investigated various aspects of market orientation and innovation performed by small-sized businesses in small towns of the U.S. The objectives for the study were: 1) to examine market orientation constructs in the small-sized organization, 2) to examine market orientation in relation to business innovation and business performance, and 3) to examine business innovation in relation to business performance.

A sub-sample of small businesses for the study was drawn from the larger national random sample. Small businesses located in communities of less than 20,000, counties adjacent and non-adjacent to non-metropolitan area were chosen for the study. The sample population of the study was small businesses operating with less than 20 employees and with annual sales of \$1 million or less.

Simple and multiple regression analyses were performed to examine relationships among the variables under study. The simple regression analysis suggested a significant and positive relationship between small business owners/managers' competitor and customer market orientation and their performance in terms of gross profit (before taxes) and perceived overall business success. The results also indicated that there was a positive and significant relationship between both small business owners/managers' competitor and customer market orientation and innovation. A positive and significant relationship between the small town business owners/managers' degree of innovativeness and their business performance in terms of gross profit and their perceived overall business success was also found.

The results of the multiple regression analyses indicated that among the three variables, business innovation, competitor market orientation, and customer market orientation, business innovation significantly influenced the small town business firms' gross

profit, while customer market orientation and competitor market orientation did not significantly affect small town businesses' gross profit with innovation in the equation. Customer market orientation had the most significant influence on small business owners/managers' perceived overall business success among the three variables.

Along with market orientation, innovation was found to be an important factor in business performance in small town businesses. The adoption of market orientation led innovation for small town businesses. When small town businesses are more market-oriented, they are also more innovative and show strong business performance.

CHAPTER 1: INTRODUCTION

Background

Small Businesses in Small Towns

Small businesses are a major component of the U.S. economy. According to the Small Business Administration, businesses with less than 500 employees are categorized as small business. National statistics reveal that small, new business ventures contribute to the growth and development of the U.S. economy by playing an important role in growing and creating new jobs and industries and in developing innovative and new products (Box, Watts, & Hisrich, 1994; Julien, 1995; Kirchhoff, 1996; Tosterud & Habbershon, 1992). Over 95% of the businesses that exist in the U.S. are small businesses (Small Business Administration, 1996). Approximately 23 million small businesses employ more than half of the private workforce and produce 39 percent of the United States' gross national product (Small Business Administration, 1998). Most of the new jobs created in the U.S. come from small and expanding firms, not large established companies (Tosterud & Habbershon, 1992)

Small businesses also take on an important role in small towns in which they are located (Fincham & Minshall, 1995). Not only do local small businesses make a variety of products and services available along with creating new job opportunities, but they also play an important role in strengthening the local economy and developing community (Fisher & Woods, 1987). Small businesses are essential to small towns. In this study, the focus is on the micro level of small businesses in small towns that operate with less than 20 employees and with annual gross sales of less than \$1 million. Small towns in this study are defined as communities with less than 20,000 population, counties that are adjacent and non-adjacent to a non-metropolitan area by using the urbanicity categories (urbanicity codes 6-9) developed

by the Economic Research Service of the U.S. Development of Agriculture (Butler & Beale, 1993).

The ultimate goal of every business organization seems to be making a profit as long as it is not a non-profit organization. Many factors need to be taken into consideration for a business organization to generate profits. A business organization needs to consider both internal and external factors. Internal issues evolve around two basic concerns: what kind of products or services should the business firm sell and how are they going to sell them to the markets. Business organizations also need to consider who and what else is out there. In other words, business organizations need to know who the competitors are and other external environments that can affect their business. This is the basic concern of the external factors. When both the internal and the external factors are taken into consideration, a business organization is able to generate profits.

Market Orientation

There are many orientations that large and small companies have employed for a better business performance. It is known that there are two main orientations that were frequently adopted by business organizations. One is a product/service orientation and the other is a market orientation. While product orientation focuses on the product itself and is concerned with what is easiest to produce, market orientation emphasizes the organization's responsiveness toward changes in customers' needs and wants (Kohli & Jaworski, 1990; Lear, 1963). The adoption of a market orientation means making the target markets as the central focus for all business activities.

Market orientation is an organizational culture (Deshpande, Farley, & Webster, Jr., 1993; Kohli & Jaworski, 1990; Kotler, 1980; Narver & Slater, 1990). More specifically,

Narver and Slater (1990) defined market orientation as “the organization culture that most effectively creates the necessary behaviors for the creation of superior values for buyers (customers) and thus, continuous superior performance for the business” (p. 21).

Organizational culture refers to a set of shared beliefs and values that lead the organization members’ behaviors and actions (Orvis, 1996). All business practices and behaviors are the reflection of the selected organizational culture.

Determining the needs and wants of the customers is embedded in the values and beliefs of the market-oriented organizations (Kotler, 1980). Satisfying the target customer is the focal point of market-oriented businesses. The values and beliefs of placing the customer as the focus lead market-oriented organizations to set specific behaviors to higher the level of customer satisfaction and to greater business performance (Narver & Slater, 1990).

Most of the studies in the marketing area have focused on describing the attributes of market-oriented firms and perhaps a single aspect of market orientation (Hurley & Hult, 1998). As an organizational culture, market orientation consists of certain behaviors and activities to achieve a positive result in business performance. Organizational culture plays an important role in providing consistent meaning for business organizations’ primary activities (Kosters, Damhorst, & Kunz, 1996).

Scholars such as Kohli and Jaworski (1990) emphasized, in market orientation, specific activities rather than the philosophical concepts. Deshpande and Farley (1996) suggested that market orientation should be considered along with a set of behaviors and processes. In other words, market orientation should be used to consider processes, activities, and behaviors in a business organization (Uncles, 2000). Narver and Slater’s, and

Pelham and Wilson's concept of market orientation focuses around understanding the determinants of a business' behavioral orientations toward the marketplace (Lukas, 1996).

Narver and Slater (1990) argued that there are three behavioral components in market orientation. The three behavioral components were customer market orientation, competitor market orientation, and interfunctional coordination. Customer orientation refers to understanding the target customers to continuously create superior values for the customers while competitor orientation refers to understanding the current and potential competitors' strengths and weaknesses and capabilities and strategies. Lastly, interfunctional coordination refers to coordinately using the company resources to create superior value for the target customers. Narver and Slater (1990) concluded that only the implementation of all the three behavioral orientations provided an organization with the comprehensive framework to create sustainable superior value for its current and future customer needs and preferences (Lukas, 1996). However, in this study, only customer orientation and competitor orientation will be taken into account as the behavioral components of market-oriented business because the focus of this study is on small town businesses most of which have less than 20 employees. The small number of employees makes interfunctional coordination difficult to study as a behavioral component for small businesses.

Why is market orientation important to small businesses in small towns? In recent years, the expanding competitive environment, such as the globalization in world markets, and the increasing uncertainty of customer environment with the constant changes in customers' tastes have motivated both the academia and many U.S. business firms to reemphasize market orientation (Pelham, 2000). Marketing scholars have suggested that

understanding the customers need to be put in a prior position when marketing products and services (Pleshko, 1993).

It is known that the familiarity and the favorable relations with other community members drive consumers in small towns to shop with local businesses (Choi, 1999). However, small towns are changing. Increasing numbers of small town consumers has been able to use big urban and suburban malls, shopping centers, and discount stores (Leistritz et al., 1987, 1989). The improvement of roads and highways has enabled consumers in small towns to travel outside their own community to purchase products and services in larger cities (Ayres, Leistritz, & Stone, 1992). Also, development of e-commerce and Internet shopping has broadened the small town customers' options in purchasing their desired products and services. Now, small town businesses not only have to compete inside their own town against other local businesses but also businesses outside the town and even around the world to survive. This environmental change has created the need for small business owners/managers in small towns to develop a unique orientation to bring their local customers back into the market, which leads to profitability.

Most of the prior studies have examined the market orientation's influence on business performance in the large and medium-sized business level or in firms that are located in metropolitan areas. It is important to extend the study on the market orientation's effect on business performances to small town businesses because the relationship between market orientation and business performance in small business firms in small towns may be different from those found in prior research in large and medium-sized firms or firms in metropolitan areas. The present study looked into how small town firms orient their

businesses to meet the needs and wants of their local or target customers and how market-oriented organizational activities and behaviors lead to their business performance.

Business Innovation

In the United States, small businesses are the core of the economic growth and innovation. Caruana, Morris, and Vella (1998) defined innovation as “the development of novel or unique products, services, or processes” (p. 17). Thus, innovation engages in the creation of a new product, service, or process (Brentani, 2000). According to Freel (2000), informal and flexible communications and business operations enable small firms to be more innovative than big businesses. Informality and flexibility in business operations allowed small and growing business firms in the U.S. to become a dominant force of innovation (Khan & Manopichetwattana, 1989).

Innovation is “an essential condition of economic progress and a critical element in the competitive struggle of enterprises and of nation states” (Freeman & Soete, 1997, p. 1-2). To compete with larger, more established companies in larger metropolitan cities, small firms in small towns may need unique and innovative ideas and products. In addition, when considering today’s fast changing technologies and aggressive competition in global markets, business firms should rely on a steady flow of innovative products for survival and competition (Deeds, Decarolis, & Coombs, 2000). Innovation is a critical element for small firms to improve and maintain their competitiveness (Rothwell & Dogson, 1991).

Market orientation is a continuous innovative behavior (Kohli & Jaworski, 1990). Since the market orientation emphasizes a customer focus, market oriented firms tend to implement greater innovation in products and services offering the benefits to their customers. Market-oriented activities and behaviors appear to influence the innovative

activities in small business firms. The present study examined the relationship between the level of market orientation and the degree to which U.S. small business owners/managers incorporate innovative activity in products/services development and marketing in small towns.

Business Performance

Business performance has become an important research component when investigating business organization phenomena (Dess & Robinson, 1984). Most of the studies on small businesses solely examined financial information (Cragg & King, 1988), such as return on assets and growth in sales in studying business performance (Schwenk & Shrader, 1993). Dess and Robinson Jr. (1984) suggested that it is better to use objective measures such as return on investments and total sales growth in measuring organizational performance. However, because business owners/managers frequently are not willing to provide financial information to outsiders, accurate objective measures may not be available. For this reason, a researcher might consider using a subjective perceptual measure as an alternative (Dess & Robinson, 1984). Even though Dess and Robinson (1984) suggested this idea based on their studies on large organizations, their suggestion may also be applicable to small businesses in small towns. Therefore, since this study had the common problem of business owners' unwillingness to supply financial information, both financial and non-financial information was used to measure small town business firms' performance. For the financial measure, this study used gross profit (before taxes). The non-financial measure addressed perceived success of the business owners/managers as several studies employed success as measurement of business performance (e.g., Dess & Robinson, 1984; Kelleberg & Leicht, 1991).

In summary, because small businesses generally initiate and operate their business with a single or a few products and services, small-sized firms are under enormous pressure to develop relevant and up-to-date business strategies to compete and survive in today's dynamic, complex, and highly competitive market situations (Kosters, Damhorst, & Kunz, 1996). As an organizational culture considering both customers and competitors, market orientation could be taken as the basis of proper or important organizational behavior and activities. Managerial willingness to adopt and generate a market-oriented culture can be a means of improving competitiveness in small firm operations. Detailed and comprehensive discussion of small town businesses' employment of a market orientation will contribute to understanding today's small business aspects.

Whether a business is successful or not can be determined by its performance. Many studies have indicated that market orientation and innovation each have a positive effect on business performance. There also have been recommendations that constructs related to innovation should be incorporated into market orientation when examining business performance (Hurley & Hult, 1996). Based on these studies, the interrelationships among three constructs—market orientation, business innovation, and business performance—are proposed in this study.

Purpose

The purpose of the study is to investigate various aspects of innovation and market orientation employed by small-sized businesses in small towns of the U.S. The study examines the multifaceted relationships between market orientation and diverse factors

associated with small town business activities such as 1) level of innovativeness in terms of the development and implementation of new product/services, new methods or areas of marketing, and new markets, and 2) business performance measured financially with gross profit (before taxes) and non-financially with the perceived overall success of the small town business owners/managers.

Objectives

The goal of the study is to better understand the effects of market orientation on business innovation and performance. Specifically, the study will analyze the relationships among two behavioral components of market orientation (customer market orientation and competitor market orientation), business innovation, and business performance in U.S. small business contexts. The objectives for this study are:

- 1) to examine market orientation constructs in the small-sized organization
- 2) to examine market orientation in relation to business innovation and business performance
- 3) to examine business innovation in relation to business performance

Definitions

Small Business: a business with less than 500 employees as defined by the Small Business Administration (1994). To study the micro level of small businesses, this study considers only businesses operating with less than 20 employees and with annual gross sales of less than \$1 million as small.

Small Town: counties that are adjacent and non-adjacent to a non-metropolitan area with population less than 20,000 (Butler & Beale, 1993).

Market Orientation: “the organizational culture that most effectively creates the necessary behaviors for the creation of superior value for buyers (customers) and thus, continuous superior performance for the business” (Narver & Slater, 1990, p. 21).

Customer Orientation: a set of organizational activities and behaviors to increase benefits to the target customers (Narver & Slater, 1990)

Competitor Orientation: a set of organizational activities and behaviors to learn and monitor strengths and weaknesses of competitors to satisfy target customers’ current and future needs (Lukas, 1996; Narver & Slater, 1990).

Innovation: “development of novel or unique products, services, or processes” (Caruana, Morris, & Vella, 1998, p.17).

Organization of the Dissertation

This dissertation is organized into five chapters. Chapter 1 describes the surrounding issues and justification of the study. The purpose of the study and research objectives are also introduced. Chapter 2 reviews the previous studies regarding market orientation, innovation, and business performance. This chapter also provides the hypotheses generated for the study. Chapter 3 explains the research methods employed in this study, including questionnaire development, data collecting procedures, and data analysis. Chapter 4 provides the results of data analyses including the test of the hypothesized model. Finally, Chapter 5 presents the discussion of the findings, a summary of the study, implications of results and suggestions for further research.

CHAPTER 2: LITERATURE REVIEW

This chapter begins with a description of the distinguishing features and challenges of small businesses in small towns in America. The chapter also reviews literature relevant to the variables associated with market orientation and innovation. The literature review discusses the following: 1) small businesses in U.S. small towns, 2) conceptual foundations, 3) market orientation and business performance, and 4) market orientation and innovation. Research hypotheses and the model to be tested are also provided in this chapter.

Small Businesses in the U.S. Small Towns

Small businesses in America are the major creators of jobs. They represent more than 99% of all employers and provide about 75% of the new jobs (Small Business Administration, 2001). These many new jobs small businesses create provide millions of Americans, including women, minorities, and immigrants, opportunities to join the workforce (Acs, 1999).

Small businesses not only function as new job creators, but also as innovators of new products and services (Box, Watt, & Hisrich, 1994; Julien, 1995; Kirchhoff, 1996). Small businesses play an important role in experimentation and innovation. According to Acs (1999), small businesses are “an integral part of the renewal process that pervades and defines market economies” (p. 3). In other words, small businesses function as innovators of new products and services bringing technological changes and productivity growth (Box, Watts, & Hisrich, 1994; Julien, 1995; Kirchhoff, 1996).

Small businesses are efficient and dynamic (Acs, 1999). Efficiency of small businesses means that small businesses do certain things better than large businesses

(Carlsson, 1999). On the other hand, dynamics refers to the fast and constant responses to the environmental changes. Small businesses are able to be efficient and dynamic because of their organizational structure. Simple and informal organizational structure and lack of bureaucracy enable small businesses to be flexible in operation and quick in decision-making. Flexibility and fast decision-making allow small firms to provide certain products and services better and more efficiently than by large firms (Carlsson, 1999). Also, while the highly structured large organizations tend to be inefficient when it comes to dealing with changes, the simple and loose organizational structure gives small businesses an advantage to respond well to the changes, bringing variety in the economy and eliminate stagnation (Carlsson, 1999; Klein, 1977). Efficiency and dynamics are especially considered to be important elements in production and innovation (Acs & Audretsch, 1988; Pratten, 1991).

Small businesses are mostly locally owned. Locally-owned firms are likely to have strong links to the local economy (Winders, 2000). The success of small businesses in small towns is deeply connected to local economy enhancement and community development (Fisher & Woods, 1987). Locally-owned small businesses often try to find supplies, services, and capital from other local businesses (Winders, 2000). The small business owners try to market their products and services to the surrounding region and in turn, spend or invest a great portion of their profits locally (Pred, 1976; Watts, 1981).

Conceptual Foundations

Marketing Concept

Market orientation represents the implementation of the marketing concept. The marketing concept is an expression that businessperson appreciates the importance of the consumers in the buying and selling process (Houston, 1986). Marketing concept is defined by McNamara (1972) as “a philosophy of business management, based upon a company-wide acceptance of the need for customer orientation, profit orientation, and recognition of the important role of marketing in communicating the needs of the market to all major corporate departments” (p. 51). Introduced to U.S. business practices in the early 1950s, the marketing concept has long been recognized as a heart of modern marketing discipline (Barksdale & Darden, 1971; Jaworski & Kohli, 1993; Kohli & Jaworski, 1990; Orvis, 1996). Marketing concept is the philosophical foundation of a market orientation (Kohli & Jaworski, 1990).

In recent years, marketing academicians and practitioners have been actively involved to develop a framework for understanding the implementation of the marketing concept (Kohli & Jaworski, 1990). A business philosophy can be implemented with specific activities and behaviors in an organization. Foxall (1984) argued that the marketing concept would include “attitudes and behavior of all members of the company” toward their customers and, a market orientation implies the organization’s willingness to adopt the marketing concept.

Market Orientation

Several studies provide a useful framework for examining various aspects of market orientation in business organizations. Specifically, the works of Kohli and Jaworski (1990), Narver and Slater (1990), and Pelham and Wilson (1996) help in the theoretical

understanding of the market orientation construct. Each study puts emphases on different aspects of the market orientation constructs, however, the fundamental dimensions of each study are conceptually associated with one another.

Narver and Slater (1990) defined market orientation as “the organization culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers (customers) and, thus, continuous superior performance for the business” (p. 21). Using a sample of 140 strategic business units (SBUs) of a major western corporation, they conducted an exploratory study in which they developed a measure of market orientation and investigated its effect on business performance. Narver and Slater (1990) examined the behavioral characteristics of the market oriented business and suggested three behavioral components for market oriented organizations – customer orientation, competitor orientation, and interfunctional coordination.

First, Narver and Slater (1990) argued that customer orientation was one important component of market orientation. Customer orientation refers to the better understanding of target customers, which in turn, brings superior value for the customers. Customer-oriented business organizations devise plans to collect and interpret information about the customers.

Competitor orientation was the second component of market orientation referring to the learning and monitoring the current and even potential competitors’ strengths and weaknesses and capabilities and strategies (Day & Wensely, 1988; Narver & Slater, 1990). Narver and Slater (1990) insisted that to satisfy the target customers’ current and expected needs and wants, market-oriented organizations needed to know and analyze the major current and potential competitors.

The third component of market orientation was interfunctional coordination. Narver and Slater's definition of interfunctional coordination was "the coordinated utilization of company resources in creating superior value for target customers" (p. 22). Any person within any function of a business firm could be a potential contributor in creating value for customers. To create superior value for customers, a business firm needs to effectively and continuously use and integrate, as well as adapt as necessary, its entire human and other capital resources.

In sum, Narver and Slater (1990) saw market orientation as a one-dimension construct consisting of three behavioral components that were equally important concepts of the market orientation construct. As mentioned earlier, even though Narver and Slater (1990) suggested customer orientation, competitor orientation, and interfunctional coordination as the three behavioral components for market-oriented businesses, in this study, only customer orientation and competitor orientation will be taken into account as the behavioral components of market-oriented business. The reason interfunctional coordination will not be a part of this study is that the focus of this study is on small town businesses most of which have less than 20 employees. The number of the employees in this study is too small to study the interfunctional coordination as a behavioral component for small businesses in small towns.

Kohli and Jaworski (1990) explained the construct of market orientation and provided a fundamental theory of market orientation using in-depth field interviews with managers and executives in various functions and business firms (Slater & Narver, 1994). Kohli and Jaworski (1990) suggested that market orientation needed to be understood as a continuous construct more than as a dichotomous construct. More specifically, Kohli and Jaworski

(1990) argued that it appeared appropriate to view market orientation of an organization as one of degree, rather than as being either present or absent.

According to Kohli and Jaworski (1990), the operationalization of market orientation called for the focus on specific activities rather than philosophical concepts. They viewed market orientation as composed of sets of activities by defining market orientation as “the organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across department, and organization-wide responsiveness to it” (1990, p. 60).

Kohli and Jaworski (1990) conceptualized the three areas of emphases as parts of a multidimensional market orientation construct: 1) market intelligence generation, 2) market intelligence dissemination, and 3) responsiveness to market intelligence. Kohli and Jaworski (1990) argued that organization-wide generation of market intelligence was the starting point of a market orientation. Market intelligence involved careful analysis and anticipation of customer needs and preferences and various market factors such as government regulation, technology, competitors, and other environmental forces. Effective market intelligence entailed organizational activities to develop an understanding of current and future customer needs and the factors influencing them.

Intelligence dissemination involved effective information sharing of the market needs and participation of nearly all the organization departments. According to Kohli and Jaworski (1990), for an organization to adapt to market needs, market intelligence must be communicated and disseminated to relevant departments and individuals in the organization.

Responsiveness to market intelligence involved taking organization-wide activities in response to the generated and disseminated intelligence. A variety of departments

participated in selecting target markets, designing and offering products/services, and producing and distributing the products to meet current and anticipated customer needs.

The studies of Narver and Slater (1990) and Kohli and Jaworski (1990) were extended by Pelham and Wilson (1996) who claimed that market orientation could be a significant determinant of small business success. Most of the early market orientation literature, including the works of Narver and Slater (1990) and Kohli and Jaworski (1990), concentrated on explaining on the implementation of market orientation in the larger organization context.

Expanding on the work of Kohli and Jaworski (1990) and Narver and Slater (1990), Pelham (2000) and Pelham and Wilson (1996) developed an integrated model to help in determining market orientation's relative impact on small-business performance. In Pelham (2000) and Pelham and Wilson's (1996) study, they implied that the firm needed to understand customer needs and competitors' capabilities and weaknesses, and needed to perform activities aimed to achieving superior customer satisfaction. Their studies showed that the most influential market orientation elements were quick response to negative customer satisfaction information, strategies based on creating value for customers, immediate response to competitive challenges, and fast detection of changes in customer product preferences. According to the results of Pelham and Wilson (1996), market orientation had a positive influence on relative product quality, new product success, and profitability in small firms. Pelham and Wilson (1996) argued that small firms were characterized by less formal and simpler organization structures, and these characteristics enabled the small firms to effectively perform market-oriented activities. Pelham and Wilson (1996) concluded that market orientation offered small firms a strong source of competitive advantage and enhanced performance capability.

Market Orientation and Business Performance

Many studies have been devoted to examine the relationship of market orientation to business performance in medium size and larger companies. In a study of the effect of market orientation on business performance in larger manufacturing companies, Barret and Weinstein (1998) found that facilitating influences of corporate entrepreneurship and market orientation were positively related with business performance. Barrett and Weinstein's (1998) study indicated that market orientation was an important determinant of larger firms' business performance.

Market orientation has also been found to have a strong positive impact on business performance in machine tool industry markets, healthcare organizations, and banking industry (Balakrishnan, 1996; Han, Kim, & Srivastava, 1998; Kumar, Subramanian, & Yauger, 1997). The studies revealed positive links between market orientation and medium and larger companies' organizational performance in terms of sales growth, effectiveness, and efficiency in firm operations.

A few studies have been conducted to assess the influence of market orientation on small firm performance. Pelham (2000) studied associations between market orientation and influences on performance in small and medium-sized firms. His research findings indicated that market orientation was positively related to the growth/share, marketing/sales effectiveness, and gross profit in small and medium manufacturing firms. Pelham (2000) argued that market orientation provided small firms with more competitive advantages when compared with large firms. Small and medium firms were posited to perform market orientation more effectively with greater potential and competitive advantages of "simpler or

organizational structure, flexibility, adaptability, capacity for speed, and propensity for innovation” (p. 63).

In his research on the effect of a market orientation on small business performance in southeast Florida, Preston (1996) found that as a business culture devoted to the continuous value creation for customers, market orientation positively influenced small firms’ return on sales, sales growth, and longevity. Balakrishnan (1996) also found a positive relationship between market orientation and business performance in the context of the machine tool industry.

Most studies on the linkage between a market orientation and business performance have focused on examining the influences of market orientation on financial performance.

Financial performance was often measured by return on assets, growth in sales or profitability in studies on market orientation (Dawes, 2000; Slater & Narver, 1994). There are limited studies that have looked at the relation of market orientation to U.S. small business performance in financial performance and other aspects of business performance.

Kalleberg and Leicht (1991) argued that survival and success are important aspects of organizational performance. The present study will examine how competitor market orientation and customer market orientation in the small town business firm relates to business performance including the financial measure of gross profit (before taxes) and perceived overall business success. The following hypotheses were generated.

H1: There will be a positive relationship between small business owners/managers’ competitor market orientation and their business performance in terms of:

- a) gross profit
- b) perceived overall business success

H2: There will be a positive relationship between small business owners/managers' customer market orientation and their business performance in terms of:

- a) gross profit
- b) perceived overall business success

Market Orientation and Innovation

Does market orientation in small business firms in small U.S. communities drive innovation? The influences of market orientation on innovation have been recognized to be important. Recently, Hurley and Hult (1998) made recommendations for incorporating constructs related to innovation into research on market orientation. In an empirical study of market orientation, innovation, and organizational learning in a large agency of the U.S. federal government, Hurley and Hult (1998) found that learning and market orientation were antecedents to innovativeness. According to Hurley and Hult (1998), market-oriented organizations provided a source of new ideas for change and improvement and motivation to respond to the environment.

Kohli and Jaworski (1990) viewed market orientation as a continuous innovative behavior because a market orientation involved innovative strategies and activities in response to changes in customer needs. However, their model of market orientation did not specifically examine innovation constructs. Since market orientation emphasizes a customer focus, market oriented firms tend to implement greater innovation in products and services offering the benefits to their customers. Market-oriented activities and behavior appear to influence the innovative activities in small business firms. Research is needed to examine the level of market orientation and the degree to which U.S. small business owners/managers

incorporate innovative activity in products/services development and marketing. Especially, a need exists for presenting a conceptual model with multidimensional components of market orientation to examine how each dimensional component contributes to the construct (Dawes, 2000).

Many prior studies of innovation have primarily focused on product innovation predominantly at the business organizational level because product innovation is widely recognized as essential to business success (Troy, Szymanski, & Varadarajan, 2001). However, Brentani (2001) argued that innovation involved the creation of a new product, service, or process. For this study, the definition of innovation will be interpreted broadly, encompassing new product or services development, new methods of marketing development, and establishment of new markets. Though evidence has been provided regarding the effect of market orientation on innovation in various business firms including manufacturing and services firms (Atuahence-Gima, 1996; Harryson, 1997; Lukas & Ferrell, 2000), less attention has been paid to the impact of market orientation on innovativeness in U.S. small town business firms. The following hypotheses were generated.

H3: There will be a positive relationship between small business owners/managers' competitor market orientation and their degree of innovativeness

H4: There will be a positive relationship between small business owners/managers' customer orientation and their degree of innovativeness

H5: There will be a positive relationship between small business owners/managers' degree of innovativeness and the following components:

- a) competitor market orientation, and
- b) customer market orientation.

H6: There will be a positive relationship between small business owners/managers' degree of innovativeness and their business performance in terms of

- a) gross profit (before taxes), and
- b) perceived overall business success.

H7: There will be a positive relationship between business performance as measured by gross profit (before taxes) in small business firms and the following components:

- a) competitor market orientation,
- b) customer market orientation, and
- c) business innovation.

H8: There will be positive relationship between business performance as measured by small business owners/managers' perceived overall business success and the following components:

- a) competitor market orientation,
- b) customer market orientation, and
- c) business innovation.

A model of the research design, portraying the predicted relationships among variables is shown in Figure 1.

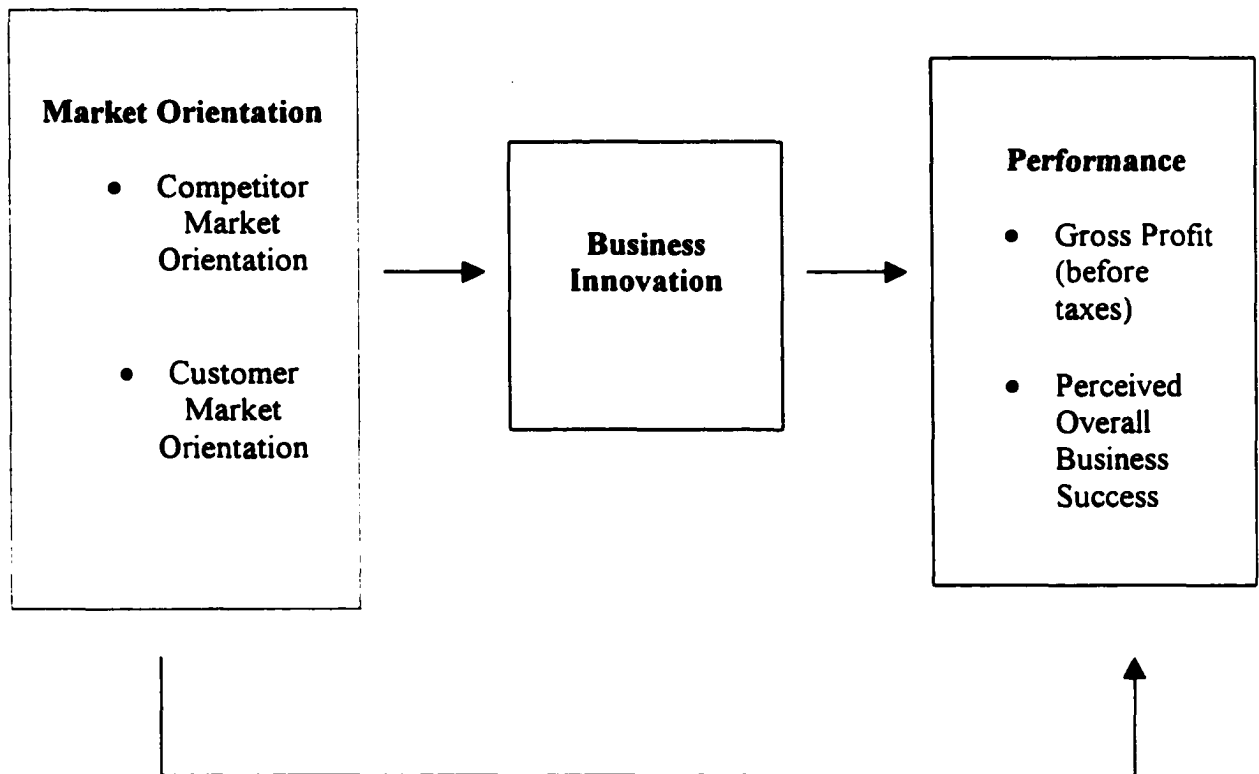


Figure 1. Research Model

CHAPTER 3: METHOD

The following chapter describes the research method used to test the research hypotheses generated in Chapter 2. The sampling procedures, data collection, questionnaire development, and data analysis are presented.

Sample

A sub-sample of small businesses for this study was drawn from the larger sample. For the larger sample, a random sampling method was used, stratifying the population of small business owners/managers into twelve strata. The Continental United States were grouped into regions by U.S. Census Bureau and urbanicity categories developed by the Economic Research Service of the U.S. Department of Agriculture to categorize urbanicity of U.S. counties (Butler & Beale, 1993) (See Table 1 and 2). The three urbanicity categories that were used for the larger sample were Metro, Adjacent non-metro, and Non-adjacent non-metro.

Survey Sampling Inc. (SSI)'s Comprehensive Business Database provided the small businesses names addresses and the main contact person. SSI used a systematic sampling procedure that assured a similar proportion of the sample counties and 2 digit Standard Industrial Classifications (SIC) based business types within each stratum as in the original population from which the sample was drawn. Firms in 9 U.S. Standard Industrial Classifications (SIC) were selected for the study – Agriculture, Mining, Construction, Manufacturing, Transportation, Wholesale, Retail, Finance/Insurance/Real Estate, and Services.

From the larger sample, a sub-sample of those small businesses located in communities of less than 20,000, counties adjacent non-metropolitan and non-adjacent non-metropolitan, were chosen for this study (Table 3).

Table 1.
Represented States for the Four Census Regions

<i>NorthEast</i>	<i>MidWest</i>	<i>South</i>	<i>West</i>
Connecticut	Illinois	Alabama	Arizona
Maine	Indiana	Arkansas	California
Massachusetts	Iowa	Delaware	Colorado
New Hampshire	Kansas	Florida	Idaho
New Jersey	Michigan	Georgia	Montana
New York	Minnesota	Kentucky	Nevada
Pennsylvania	Missouri	Louisiana	New Mexico
Rhode Island	Nebraska	Maryland	Oregon
Vermont	North Dakota	Mississippi	Utah
	Ohio	North Carolina	Washington
	South Dakota	Oklahoma	Wyoming
	Wisconsin	South Carolina	
		Tennessee	
		Texas	
		Virginia	
		West Virginia	

Source: U.S. Census Bureau.

Table 2.
Three Urbanicity Categories

<i>Urbanicity Category</i>	<i>Definition</i>
Metropolitan	Counties in metropolitan areas of 1,000,000 population or less
Adjacent non-metropolitan	Counties with urban population less than 20,000, adjacent to a metropolitan area
Non-adjacent non-metropolitan	Counties with urban population less than 20,000, not adjacent to a metropolitan area

Source: Economic Research Service of the U.S. Department of Agriculture.

Table 3.
Participants for the Telephone Interview and Mail Survey

<i>Region</i>	<i>Urbanicity Category</i>	<i>Telephone Interview</i>	<i>Mail Survey</i>	<i>Sub-Sample for the Study</i>
Northeast	Metro	21	14	
Northeast	Adjacent non-metro	28	18	18
Northeast	Non-adjacent non-metro	144	78	78
Midwest	Metro	21	15	
Midwest	Adjacent non-metro	24	15	15
Midwest	Non-adjacent non-metro	186	122	122
South	Metro	18	11	
South	Adjacent non-metro	21	8	8
South	Non-adjacent non-metro	120	68	68
West	Metro	20	14	
West	Adjacent non-metro	27	14	14
West	Non-adjacent non-metro	188	128	128
Total		818	505	451

Data Collection

Quantitative data were collected through telephone interviews and mail surveys across the Continental U.S. The data collection took place from February through May of 2000. All the telephone interviews, averaging approximately 25 minutes, were performed by the Iowa State University Statistical Laboratory using a computer-assisted telephone interviewing (CATI) software.

To contact the sample respondents, the Statistical Laboratory Staff went through several processes. First, all the phone numbers in the sample were rotated through a minimum of 12 call attempts. From this procedure, unavailable and inaccurate numbers were detected, and tracking queue was placed in for additional attempts. Phone numbers

that needed multiple attempts were tried at various different times. If there was no contact even after the multiple attempts, then these numbers were classified as ring-no-answer. If the answering machines picked up the phone, then additional attempts were made to contact the business. For suspected fax lines and modems, several attempts of calls were made at different times to determine if they were the actual business numbers needed.

All interviews were supervised under the direct administration of an interviewing supervisor in Iowa State University. To catch coding and data entry errors, simple frequencies, cross tabulations, and edit checks were conducted.

Of the 2,250 businesses initially selected in the sample, 568 were determined to be not locatable and no longer in business. From 1,682 eligible businesses, 1,348 business owners and managers were contacted. Eight hundred eighteen interviews were completed with the cooperation rate of 60.6%. Among those 818 small firms, 804 agreed to participate in a follow-up mail survey. A total of 804 survey questionnaires with a cover letter and a stamped return envelope were sent to only those small business owners/managers who agreed to participate in the mail survey. Two weeks after the initial mailing, a postcard reminder was sent. A second mailing was conducted one week later to the non-respondents. A copy of the final questionnaire can be found in Appendix B. Five hundred and five questionnaires were returned for a cooperation rate of 61.7%. A sub-sample of four- hundred-and-fifty-one small businesses located in communities of less than 20,000, counties adjacent non-metropolitan, non-adjacent non-metropolitan areas were used for the study.

Questionnaire Operationalization

Market Orientation

Aspects of market orientation were measured in the mail survey. Twelve items were intended to measure small business owners/managers' level of market orientation. The items were borrowed and modified from Pelham (1999, 2000) whose study was based on Kohli and Jaworski (1990), and Narver and Slater's (1990). The items were rated on a five-point Likert type scale ranging from *Never (1)* to *Very Often (5)* and from *Strongly Disagree (1)* to *Strongly Agree (5)*. Sample items include "How often does your managerial staff meet with customers to find out what products or services they will need in the future", "How often does your business follow-up on sales/service to provide additional service?" and "My business is quick to detect changes in the industry, the competition, or customer preferences." The measure of market orientation utilized here is a factor scale variable derived from the items. See Table 4.1 for scale items.

Innovation

The innovativeness scale was made up of five items measuring the development and implementation of new products/services, new methods of production, new methods of marketing, and establishment of new markets in small business operations. The items measuring innovation were drawn and modified from Cosh, Hughes, and Wood (1999) and Lipparini and Sobrero (1994). No (0) and Yes (1) dichotomous point scales were used. For this analysis a single innovation variable was created by summing the five items. See Table 4.2 for scale items.

Performance

Performance is measured by financial and personal perceptions. One item in the mail survey measured business financial performance in small business operations. The item was measured by asking with an open-ended question about gross profit (before taxes) for the firm.

One item in the telephone survey measured business performance as measured by the small business owners/managers' perceived overall business success. Participants responded to the question: "Overall, how successful is your business as a whole?" The item was rated on a five-point Likert scale ranging from "1 = Not at all successful" to "5 = Very successful."

Demographic Information

Demographic questions were included in the telephone survey. Small business owners/managers respondents were asked about their age, sex, overall health condition, education, ethnicity, marital status, spouse's current employment situation, number of people less than 18 years old living in the household, business start up mode, and annual household incomes before taxes. The telephone survey also included a question regarding to the community size to verify Beale coding.

Data Analysis

Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS). Data analysis in the study included descriptive analyses, correlation analyses, and simple or multiple regression analyses.

Descriptive Analyses

Descriptive statistics, including frequencies, means, median, and standard deviations, were computed for all variables to obtain a general profile of the distribution of responses. In particular, weighted frequency distributions, means, median, and standard deviations for the demographic variables were calculated to identify the characteristics of the sample for the study.

Factor Analyses

Factor analysis was performed on the 12 market orientation items in the questionnaire to verify dimensionality and intercorrelation among items within the measure. Principal components factor analysis with varimax rotation was employed to extract and rotate factors. The number of factors was determined by eigenvalue size and scree test (Kim & Mueller, 1978). Considering an eigenvalue size greater than 1.0, two factors for the market orientation measures were generated. Items with a) factor loadings more than .50 on the given factor and b) factor loadings no greater than .40 on any other factor were retained.

To assess reliability of the measurement scales, an internal consistency test was performed for factors identified from the factor analyses using coefficient alpha.

Correlation Coefficients

Correlation coefficients were computed to investigate the strength of association among the variables. Pearson's product-moment correlation analysis was conducted to examine the strength of the association between the variables measuring market orientation, business innovation, and business performance. The level of significance was set at 0.05 or less.

Regression Analyses

Simple and multiple regression analyses were used to describe the relationship between the mean of the dependent variable and the independent variable. The single independent variables were individually regressed on the dependent variable using simple regression analysis. The study investigated whether an association existed between the two variables. Multiple regression analysis was conducted to calculate the path coefficient of the model developed. The multiple regression model estimates relationships between the multiple predictor variables and the dependent variable.

CHAPTER 4: FINDINGS

This chapter presents results of data analyses. Data analyses included descriptive statistics and factor analysis. For hypothesis testing, simple and multiple regression analyses were used to examine relationships among the variables, including market orientation, business innovation, and firm performance.

Descriptive statistics

Frequencies, means, medians, and standard deviations for all variables were calculated to obtain a general profile of the distribution responses. Tables 4.1, 4.2, and 4.3 shows a summary of the descriptive statistics for the variables of the study.

Table 4.1. Means and Standard Deviations for Market Orientation Measures

Questions	Non - Weighted	Mean Weighted	Non- Weighted	SD Weighted
1. How often does your managerial staff meet with customers to find out what products or services they will need in the future?	2.35	2.32	.822	1.32
2. How often does your business follow-up on sales/service to provide additional service?	2.94	2.88	1.29	1.39
3. How often does your managerial staff discuss customers' future needs?	2.80	2.91	1.28	1.39
4. How often does your managerial staff discuss competitive strengths and strategies	2.66	2.87	1.27	1.36
5. How often does your business intentionally take advantage of competitors' weaknesses?	2.47	2.41	1.29	1.30
6. How often does your business hire outside marketing consultants?	1.24	1.24	.64	.63
7. How often, when faced with decision-making situations, are you willing to take high risks?	2.68	2.79	1.09	1.22

Range 1 to 5; Never (1) to Very often (5)

Table 4.1 Continued

Questions	Mean		SD	
	Non - Weighted	Weighted	Non- Weighted	Weighted
8. My business is quick to detect changes in the industry, the competition, or customer preferences.	3.54	3.71	.92	.95
9. My business responds quickly to negative feedback from customers.	4.17	4.10	.82	.86
10. The marketing my business does is based primarily on our perception of customer needs.	3.82	3.78	.95	.93
11. Our competitive advantage is primarily maintained by understanding and meeting our customers' needs.	4.05	4.04	.90	.82
12. In my business, everyone works together to meet our customers' needs.	4.12	4.13	.91	.83
Cronbach's Alpha = .86				
Range 1 to 5; 1 (Strongly Disagree) to 5 (Strongly Agree)				

Table 4.2. Means and Standard Deviations for Business Innovation Measures

Questions	Mean		SD	
	Non - Weighted	Weighted	Non- Weighted	Weighted
1. During the past 5 years, has your business developed any new products or services?	.59	.58	.49	.50
2. During the past 5 years, has your business improved the products or services it offers?	.85	.85	.36	.36
3. During the past 5 years, has your business improved its methods of production?	.67	.62	.47	.48
4. During the past 5 years, has your business developed new methods of marketing?	.46	.54	.50	.50
5. During the past 5 years, has your business established new markets?	.52	.48	.50	.50
Cronbach's Alpha = .69				
No (0) and Yes (1)				

Table 4.3. Means and Standard Deviations for Gross Profit (before taxes) and Perceived Overall Business Success

Questions	Non - Weighted	Mean Weighted	Non- Weighted	SD Weighted
1. Overall, how successful is your business as a whole?	4.02	4.15	.82	.79
Range 1 to 5; Not at all successful (1) to Very successful (5)				
Gross profit (before taxes) – open-ended question	\$64927.60	\$69780.34	\$92045.56	\$85188.59

Demographic Profile

The overall profile of the participating small business owners/managers' demographic characteristics is presented in Table 5. Of 451 respondents, 147 (32.6%) were female and 304 (67.4%) were male small business owners/managers. The distribution of ages of the respondents ranged from 20 to 85, with a mean of 50 years; 61.7% were between the ages of 41 and 60. Many (29.9%) respondents had some college degree, while others had high school degrees (26.4%), bachelor (20%), advanced degrees (12%), attended vocational/technical school (8%), and less than a high school degree (3.5%).

Most of the participating business owners/managers were Caucasians (96.0%). The rest of the respondents were Native American, Aleut, or Eskimo (1.1%), Asian or Pacific Islander (0.4%), and something else (0.7%). The majority (84.9%) of the participants were married or living together as married, with a median of no children in household, 5.6% were single

and/or never married, and 9.3% were divorced, widowed, or separated. Household income for the respondents ranged from less than \$10,000 to \$90,000 or above.

Table 5. Demographic Characteristics (N=451)

Variable	Description	Frequency	Percent	Median		SD	
				Non-weighted	Weighted	Non-weighted	Weighted
Gender	Female	147	32.6	1.00	1.00	.47	.45
	Male	304	67.4				
Age	20-30	16	3.5	50.00	49.00	11.50	11.62
	31-40	73	16.2				
	41-50	153	33.9				
	51-60	125	27.8				
	61-70	54	12.0				
	71-85	27	5.9				
	Missing	3	.7				
Education	Less than high school	16	3.5	4.00	4.00	1.44	1.34
	High school graduate	119	26.4				
	Vocational/technical school	36	8.0				
	Some college	135	29.9				
	Bachelor degree	90	20.0				
	Advanced degree (Master, Ph.D. etc)	54	12.0				
	Missing	1	.2				
Ethnic Identity	Caucasian	433	96.0	1.00	1.00	.47	.51
	Asian or Pacific Islander	2	.4				
	Native American, Aleut or Eskimo	5	1.1				
	Something else	3	.7				
	Missing	8	1.8				

Table 5. Continued.

Variable	Description	Frequency	Percent	Median		SD	
				Non-Weighted	Weighted	Non-Weighted	Weighted
Marital Status	Married	377	83.6	1.00	1.00	1.34	1.40
	Living as married	6	1.3				
	Divorced	29	6.4				
	Separated	3	.7				
	Widowed	10	2.2				
	Single and never married	25	5.6				
	Missing	1	.2				
Children in household	No children	284	63.0	.00	.00	1.23	1.21
	1 Child	52	11.5				
	2 Child	71	15.8				
	3 Child	31	6.9				
	4 Child	6	1.3				
	5 Children	3	.7				
	7 Children	2	.4				
	8 Children	1	.2				
	Missing	1	.2				
Household income	Less than \$10,000	17	3.8	6.00	6.00	2.86	2.90
	From \$10,000 up to \$20,000	54	12.0				
	From \$20,000 up to \$30,000	53	11.7				
	From \$30,000 up to \$40,000	42	9.3				
	From \$40,000 up to \$50,000	39	8.6				
	From \$50,000 up to \$60,000	58	12.9				
	From \$60,000 up to \$70,000	36	8.0				
	From \$70,000 up to \$80,000	31	6.9				
	From \$80,000 up to \$90,000	13	2.9				
	\$90,000 or more	76	16.8				
	Missing	32	7.1				

Table 5. Continued

Variable	Description	Frequency	Percent	Median		SD	
				Non-weighted	Weighted	Non-weighted	Weighted
Weighted							
Population of community	Less than 2,500	182	40.4	2.00	2.00	1.20	1.13
	From 2,500 up to 5,000	95	21.1				
	From 5,000 up to 10,000	82	18.2				
	From 10,000 up to 50,000	85	18.8				
	From 50,000 up to 100,000	5	1.1				
	100,000 or more	1	.2				
	Missing	1	.2				

Organizational Profile

A profile of the respondents' organizational characteristics is presented in Table 6. Many respondents (27.7%) were in personal services, followed by agriculture (19.5%), retailing (19.1%), mining/construction (12.2%), manufacturing (3.3%), transportation (2.7%), and wholesale (2.2%). Around thirty five percent of the respondents reported that they had no employees in their business firm, resulting in a mean of 2 employees. More than 40% of the respondents' firms earn less than \$100,000.

Table 6. Organizational Characteristics (N=451)

Variable	Description	Frequency	Percent	Median		SD	
				Non-weighted	Weighted	Non-weighted	Weighted
Type of business	Agriculture	88	19.5	7.00	7.00	3.42	3.49
	Mining/Construction	55	12.2				
	Manufacturing	15	3.3				
	Transportation	12	2.7				
	Wholesale	10	2.2				
	Retail	86	19.1				
	Financial, Insurance, Real Estate	23	5.1				
	Commercial services	37	8.2				
	Personal services	125	27.7				
Total number of employees	Only the owner	159	35.3	1.00	1.00	3.19	4.07
	1 employee	80	17.7				
	2 employees	54	12.0				
	3 employees	43	9.5				
	4 employees	26	5.8				
	5 employees	21	4.7				
	6 employees	20	4.4				
	7 employees	11	2.4				
	8 employees	8	1.8				
	9 employees	7	1.6				
	10 employees	5	1.1				
	11 employees	4	.9				
	12 employees	3	.7				
	13 employees	3	.7				
	14 employees	3	.7				
	15 employees	1	.2				
	16 employees	0	0				
	17 employees	1	.2				
	18 employees	1	.2				
	Missing	1	.2				
Gross profit (before taxes)	Less than \$10,000	42	9.3	\$31000	\$40000	\$92045	\$85188
	From \$10,000 up to \$20,000	42	9.3				
	From \$20,001 up to \$30,000	27	6.0				

Table 6. Continued

Variable	Description	Frequency	Percent
Gross profit (before taxes)	From \$30,001 up to \$40,000	24	5.4
	From \$40,001 up to \$50,000	15	3.3
	From \$50,001 up to \$60,000	6	1.3
	From \$60,001 up to \$70,000	4	.9
	From \$70,001 up to \$80,000	14	3.1
	From \$80,001 up to \$90,000	5	1.1
	From \$90,001 up to \$100,000	7	1.6
	From \$100,001 up to \$200,000	24	5.4
	From \$200,001 up to \$300,000	6	1.3
	From \$300,001 up to \$400,000	5	1.1
	From \$400,001 up to \$500,000	1	.2
	From \$500,001 up to \$600,000	2	.4
	Missing	227	50.3

More than 50% of the participating small business owners/managers did not respond to the question concerning gross profit. Because this degree of missing information may generate biased results, the variables in the model were compared in two groups (those who responded and those who did not respond), by an independent sample *t*-test. The results showed that there were no significant differences between the two groups except for the household income variable. T-test results are shown in Appendix A.

Factor Analyses

A principal components factor analysis with varimax rotation was performed to investigate interrelationships among the items used in the proposed two measures of market orientation. Factor analysis allowed the researcher to determine underlying dimensionality and relationships among multiple items.

Measures of Market Orientation

The factor analysis of 12 market orientation items provided two factors with eigenvalues in excess of one and with value of over .80 for Cronbach's alpha coefficient for the summed scores of the items. Total percent of variance accounted for by the two factors was 63.48% (47.84% and 15.64%, respectively).

The first factor, entitled "competitor market orientation," was made up of 5 items and the second factor, entitled "customer market orientation," consisted of 5 items. Table 7 presents the factor items and their rotated factor loadings. Comparison of factor results between original scale items and scale in this study are also provided in Table 8.

Table 7. Factor analyses of market orientation

<u>Factor Labels and Items</u>	<u>Rotated Factor Loadings</u>	
<u>Factor one: Competitor Market Orientation</u>	Factor1	Factor 2
1. How often does your managerial staff meet with customers to find out what products or services they will need in the future?	.79	.18
2. How often does your managerial staff discuss competitive strengths and strategies?	.84	.18
3. How often does your managerial staff discuss customers' future needs?	.85	.29
4. How often does your business follow-up on sales/service to provide additional service?	.72	.34
5. How often does your business intentionally take advantage of competitors' weaknesses?	.66	.12
 <i>Eigenvalue = 4.78</i> <i>Percent of Variance Explained = 47.84%</i> <i>Cronbach's Alpha = .88</i>		
<u>Factor two: Customer Market Orientation</u>	Factor1	Factor 2
1. My business is quick to detect changes in the industry, the competition, or customer preferences.	.57	.27
2. My business responds quickly to negative feedback from customers.	.76	.22
3. The marketing my business does is based primarily on our perception of customer needs.	.73	.13
4. Our competitive advantage is primarily maintained by understanding and meeting our customers' needs.	.86	.21
5. In my business, everyone works together to meet our customers' needs.	.82	.19
 <i>Eigenvalue = 1.56</i> <i>Percent of Variance Explained = 15.64%</i> <i>Cronbach's Alpha = .86</i>		

The first factor, which consisted of 5 items, with a Cronbach's alpha value of 0.88, was labeled "competitor orientation." The factor was labeled based on the common contents of the 5 items described by the factor. Rotated factor loadings ranged from 0.66 to 0.85. The first factor explained 47.84 percent of the variance among the 10 items.

Respondents were asked to indicate their agreement on the statements about competitor orientation on a five-point Likert scale ranging from "1 = Never" to "5 = Very often." The mean of 2.68 indicates that respondents were likely to be concerned about competitors and competitive challenges in their business operations.

The second factor, which consisted of 5 items, with a Cronbach's alpha value of 0.86, was named "customer orientation." The items related to the customer focus in small business operation represented the factor. Loadings in factor two ranged from 0.57 to 0.85. The factor accounted for 15.64 percent of variance among the 10 items.

The items were measured on a five-point Likert scale ranging from "1 = Strongly disagree" to "5 = Strongly agree." The mean of respondents' scores on the items of the customer orientation factor was 3.95, indicating that the respondents were highly concerned about customer satisfaction and understanding in their business.

**Table 8. Comparison of Factor Results between
Original Scale Items (Pelham, 1999) and Scale Items in this study**

Original Scale Items	Alpha	Scale Items in this study	Alpha
Factor 1		Factor 1	
Customer Satisfaction		Customer Market Orientation	
• Speed of response to negative customer information	.69	• My business responds quickly to negative feedback from customer	.57
• Extent strategies driven by understanding of possibilities for creating customer value	.75	• My business is quick to detect changes in the industry, the competition, or customer preference	.49
• Amount of attention to after sales service	.77	• Our competitive advantage is primarily maintained by understanding and meeting our customers' needs	.63
		• In my business, everyone works together to meet our customers' needs	.58
		• The marketing my business does is based primarily on our perception of customer needs	.48
Factor 2			
Customer Understanding			
• Strategy for competitive advantage based on thoroughly understanding customer needs	.83		
• All functions responsive to serving target markets	.73		
• Managers understand how entire business can contribute to custom value	.79		

Table 8. Continued.

Original Scale Item	Alpha	Scale Item in this study	Alpha
Factor 3		Factor 2	
Competitive Orientation		Competitor Market Orientation	
• Time marketing/sales spends discussing customers needs with other functional departments	.77	• How often does your managerial staff meet with customers to find out what products or services they will need in the future?	.62
• Frequency top managers discuss competitive strengths and weakness	.78	• How often does your managerial staff discuss competitive strengths and strategies?	.68
• Frequency of taking advantage of competitor weakness	.48	• How often does your business intentionally take advantage of competitors' weakness?	.48
		• How often does your business follow-up on sales/service to provide additional service?	.69
		• How often does your managerial staff discuss customers' future needs?	.77

Results of Hypotheses Testing

The following eight hypotheses were tested using simple and multiple regression analyses to examine relationships among the variables under study. The $p \leq .05$ level was used to determine significance. No missing values were imputed; thus the number of observations for statistics run with gross profit is 222.

H1-1: There will be a positive relationship between small business owners/managers' competitor market orientation and their business performance in terms of gross profit (before taxes).

Results from a simple regression analysis revealed a significant relationship between small town business owners/managers' competitor market orientation (TCOMPET) and the gross profit of the firm (GPROF), indicating that a competitor market orientation had a significant effect on small businesses' gross profit.

The Pearson correlation and the coefficient of determination denoted by R^2 were calculated to describe the strength of the association between the two variables at $p \leq .05$ level. As shown in Table 9, a positive relationship was found between competitor market orientation and gross profit in small business firms. Those business firms in small-town communities with high competitor market orientation had higher gross profit than did those that had low competitor market orientation. The slope, b , and one-tailed t -test statistic from the summary of regression analysis also showed that there was a positive relationship between the two variables (slope $b = 16.52$, $t = 2.711$, $< .001$). The R^2 value for competitor market orientation and gross profit was .03, indicating competitor market orientation explained 3% of the variability in gross profit. Hypothesis 1-1 was supported.

Table 9. Simple Regression Analysis for H1-1: Gross Profit (before taxes) –

Competitor Market Orientation					
Analysis of Variance					
	<i>df</i>	SS	MS	<i>F</i>	<i>R</i> ²
Regression	1	60887.87	60887.87	7.35	.03
Residual	220	1822572.5	8284.42		
Variables in the Equation					
Variable	B	Beta	t	Significance T	
TCOMPET	16.52	.18	2.71	< 0.001	

(n = 222) $p \leq .05$

H1-2: There will be a positive relationship between small business owners/managers' competitor market and their business performance in terms of perceived overall business success.

Simple regression analysis (Table 10) was run to determine whether a relationship existed at the level of $p \leq .05$. The relationship between competitor market orientation of small town business firms (TCOMPET) and level of perceived success (SUCCESS) was positive and significant at $p \leq .05$, accounting for 3% of the variance of perceived overall business success. The correlation analysis for these two variables showed a positive coefficient ($r = .18$). The slope ($b = .14$) and one tailed t -test statistic ($t = 3.81, < .001$) also indicated that there was a positive and significant relationship between the two variables. Hypothesis 1-2 was supported.

Table 10. Simple Regression Analysis for H1-2:**Perceived Overall Business Success – Competitor Market Orientation**

Analysis of Variance					
	<i>df</i>	SS	MS	<i>F</i>	<i>R</i> ²
Regression	1	9.56	9.56	14.55	.03
Residual	439	288.30	.66		
Variables in the Equation					
Variable	B	Beta	t	Significance	T
TCOMPET	.14	.18	3.82	< .001	

(*n* = 441) $p \leq .05$

H2-1: There will be a positive relationship between small business owners/managers' customer market orientation and their business performance in terms of gross profit (before taxes).

To test hypothesis 2-1, a simple regression analysis including Pearson correlation was performed. The regression analysis (Table 11) showed that small town business owners/managers' customer market orientation (TCUSTOM) significantly affected the firms' gross profit (GPROF) at $p \leq .05$ level. Customer market orientation in small town business firms explained 4% of the variability in gross profit. The Pearson correlation ($r = .20$) revealed a positive relationship between customer market orientation and gross profit in small towns. The slope ($b = 26.71$) and one-tailed *t*-test statistic ($t = 3.03$, p value = .0015) also suggested a positive and significant relationship between the two variables. Hypothesis 2-1 was supported.

Table 11. Simple Regression Analysis for H2-1:**Gross Profit (before taxes) – Customer Market Orientation**

Analysis of Variance					
	<i>df</i>	SS	MS	<i>F</i>	<i>R</i> ²
Regression	1	75360.17	75360.17	9.17	.04
Residual	220	1808100.20	8218.64		
Variables in the Equation					
Variable	B	Beta	t	Significance	T
TCUSTOM	26.71	.20	3.03	0.015	

(*n* = 222) $p \leq .05$

H2-2: There will be a positive relationship between small business owners/managers' customer market orientation and their business performance in terms of perceived overall business success.

Simple regression analysis was used to examine the hypothesized relationship between the dependent variable, perceived overall business success (SUCCESS), and the independent variable, customer market orientation (TCUSTOM). Results (Table 12) from the analysis revealed a positive and significant relationship between customer market orientation and the level of perceived overall business success in small towns, indicating small business owners/managers' level of perceived overall business success significantly was affected by their customer market orientation. The Pearson correlation (r) and coefficient of determination denoted by R^2 were calculated to describe the strength of the association between the two variables at $p \leq .05$. As shown in Table 12, a significant relationship was

found between customer market orientation and level of perceived overall business success. The slope ($b = .37$) and one-tailed t -test statistic ($t = 7.07, < .001$) from the summary of regression analysis also showed that there was a positive and significant relationship between customer market orientation in small town business firms and the level of perceived overall business success. The R^2 value for the relationship between customer market orientation and level of business success was 0.10; indicating customer market orientation explained 10% of the variability in level of perceived overall business success. Hypothesis 2-2 was supported.

Table 12. Simple Regression Analysis for H2-2:

Perceived Overall Business Success – Customer Market Orientation					
Analysis of Variance					
	<i>df</i>	SS	MS	<i>F</i>	<i>R</i> ²
Regression	1	29.61	29.61	50.03	.10
Residual	441	261.01	.59		
Variables in the Equation					
Variable	B	Beta	<i>t</i>	Significance T	
TCUSTOM	.37	.32	7.07	< .001	

($n = 443$) $p \leq .05$

H3: There will be a positive relationship between small business owners/managers' competitor market orientation and their degree of innovativeness.

Simple regression analysis (Table 13) was performed to test the hypothesized relationship between the dependent variable, small business owners/managers'

innovativeness (TINNO), and the independent variable, competitor market orientation (TCOMPET). The relationship between competitor market orientation and degree of innovativeness was significant at $p \leq .05$ level. The correlation analysis for these two variables showed a significant positive coefficient ($r = .47$). The slope ($b = .14$) and one-tailed t -test statistic ($t = 11.10, < .001$) also supported that there was a positive and significant relationship between the two variables. In addition, the coefficient of determination ($R^2 = .22$) indicated that 22% of the variance in innovativeness was explained by its relationship with competitor market orientation. The results suggested that competitor market orientation in small business firms in small towns was somewhat strongly affected by the level of innovativeness. Hypothesis 3 was supported.

Table 13. Simple Regression Analysis for H3:

Business Innovation – Competitor Market Orientation					
Analysis of Variance					
	<i>df</i>	SS	MS	<i>F</i>	<i>R</i> ²
Regression	1	9.15	9.15	123.24	.22
Residual	433	31.22	.07		
Variables in the Equation					
Variable	B	Beta	t	Significance T	
TCOMPET	.14	.47	11.10	< .001	

($n = 435$) $p \leq .05$

H4: There will be a positive relationship between small business owners/managers' customer market orientation and their degree of innovativeness

To test hypothesis four, a simple regression analysis including Pearson correlation was performed. The regression analysis showed that customer market orientation (TCUSTOM) had statistically significant influence on the degree of innovativeness (TINNO) at $p \leq .05$. The Pearson correlation and the coefficient of determination denoted by R^2 were calculated to describe the strength of the association between the two variables. As shown in Table 14, a positive and strong relationship was found between customer market orientation and business innovation in small town business firms. The Pearson correlation ($r = .35$) and the simple regression results determined that small businesses with high customer market orientation reflected a higher level of innovativeness. The slope, b , and one-tailed t -test statistic from the summary of regression analysis also showed that there was a positive relationship between the two variables (slope $b = .15$, $t = 7.67$, $p\text{-value} < .001$). The R^2 value for customer market orientation and innovativeness was .12, indicating customer market orientation in small town business firms explained 12% of the variability in innovativeness. Hypothesis four was supported.

Table 14. Simple Regression Analysis for H4:

Business Innovation – Customer Market Orientation					
Analysis of Variance					
	<i>df</i>	SS	MS	<i>F</i>	<i>R</i> ²
Regression	1	4.90	4.90	58.87	.12
Residual	434	35.13	.08		
Variables in the Equation					
Variable	B	Beta	t	Significance T	
TCUSTOM	.15	.35	7.67	<.001	

(n = 436) $p \leq .05$

H5: There will be a positive relationship between small business owners/managers' level of innovativeness and the following components:

- a. Competitor Market Orientation, and
- b. Customer Market Orientation.

As shown in Table 15, the overall model was significant. Results of multiple regression suggested that two independent variables, competitor market orientation (TCOMPET) and customer market orientation (TCUSTOM), both strongly related to the dependent variable, business innovation (TINNO). The multiple regression analysis suggested that the competitor and customer market orientation were found to be significant in explaining the variability of business innovation in small town business firms.

The Pearson correlation, r , and coefficient of determination, R^2 , presented in Table 15, indicate strength of association between the dependent variable and the two

independent variables. As shown in Table 15, a positive and significant correlation was found between the dependent variable (TINNO) and the pair of independent variables (TCOMPET and TCUSTOM), with $r = .39$ and $r = .16$, respectively. The R^2 value was .24 at the $p \leq .05$ level, indicating that the variables, competitor market orientation and customer market orientation, explained approximately 24% of the variance in innovation in small town business firms.

Table 15. Multiple Regression Analysis Estimating Business Innovation for H5

	<i>df</i>	SS	MS	<i>F</i>	<i>R</i> ²
Regression	2	9.61	4.81	66.37	.24
Residual	430	31.14	.07		
Variables in the Equation					
Variable	B	Beta	t	Significance	T
TCOMPET	.48	.039	7.93	< .001	
TCUSTOM	.69	.160	3.20	< .001	

($n = 433$) $p \leq .05$

H6-1: There will be a positive relationship between small business owners/managers' degree of innovativeness and their business performance in terms of gross profit (before taxes).

Results from a simple regression analysis revealed a significant relationship between small town business owners/managers' innovativeness (TINNO) and the gross profit of the

firm (GPROF), indicating gross profit in small business firms was strongly affected by the business innovation.

The Pearson correlation and the coefficient of determination denoted by R^2 were calculated to describe the strength of the association the two variables. As shown in Table 16, a positive and significant relationship was found between business innovation and gross profit in small community business firms. The Pearson correlation ($r = .23$) and the simple regression results determined that business firms in small communities with a high level of business innovativeness had more gross profit. The slope, b , and one-tailed t -test statistic from the summary of regression analysis also showed that there was a positive relationship between the two variables (slope $b = 68.99$, $t = 3.42$, $< .001$). The R^2 value for business innovation and gross profit was .05, indicating business innovation in small communities explained 5% of the variability in gross profit. Hypothesis 6-1 was supported.

Table 16. Simple Regression Analysis for H6-1:

Business Innovation – Gross Profit (before taxes)					
Analysis of Variance					
	<i>df</i>	SS	MS	<i>F</i>	<i>R</i> ²
Regression	1	96293.96	96293.96	11.71	.05
Residual	217	99.26	.46		
Variables in the Equation					
Variable	B	Beta	t	Significance T	
TINNOV	68.99	.23	3.42	< .001	

($n = 219$) $p \leq .05$

H6-2: There will be a positive relationship between small business owners/managers' degree of innovativeness and their business performance in terms of perceived overall business success.

To test hypothesis 6-2, a simple regression analysis was performed. The regression analysis showed that small business owners/managers' innovativeness (TINNO) was statistically significant for their level of perceived business success (SUCCESS) at $p \leq .05$. The Pearson correlation and the coefficient of determination denoted by R^2 were calculated to describe the strength of the association between the two variables. As shown in Table 17, a positive relationship was found between business innovation and level of perceived business success in small town business firms at $p \leq .05$. The Pearson correlation ($r = .13$) and the simple regression determined that small business owners/managers with high business innovativeness had more perceived business success. The slope, b , and one-tailed t -test statistic from the summary of regression analysis also showed that there was a positive relationship between the two variables (slope $b = .35$, $t = 2.76$, p -value = .003). The R^2 value for business innovation and overall business success was .02, indicating business innovation in small town business firms explained 2% of the variability in perceived overall business success. Hypothesis 6-2 was supported.

Table 17. Simple Regression Analysis for H6-2:**Business Innovation – Perceived Overall Business Success**

Analysis of Variance					
	<i>df</i>	SS	MS	<i>F</i>	<i>R</i> ²
Regression	1	5.06	5.06	7.64	.02
Residual	439	290.86	.66		
Variables in the Equation					
Variable	B	Beta	t	Significance	T
TINNOV	.35	.13	2.76	.003	

(*n* = 441) $p \leq .05$

H7: There will be a positive relationship between gross profit (before taxes) in small business firms and the following components:

- a. Competitor Market Orientation
- b. Customer Market Orientation, and
- c. Business Innovation.

Three variables, competitor market orientation, customer market orientation, and business innovation, served as the independent variables. As shown in Table 18, the overall model was significant ($F = 5.12$, $p = .001$), accounting of 7% of the variance of small town business firms' gross profit. Specifically, the multiple regression analysis revealed that of the three variables, small business owners/managers' innovativeness (TINNO) was a significant predictor of small business firms' gross profit; meaning that small town business firms' gross profit was strongly affected by the business innovation. On the other hand, the competitor

market orientation (TCOMPET) and customer market orientation (TCUSTOM) did not contribute significantly to the regression model given innovation in the equation.

Table 18. Multiple Regression Analysis Estimating Gross Profit (before taxes) for H7

Analysis of Variance					
	<i>df</i>	SS	MS	<i>F</i>	<i>R</i> ²
Regression	3	125794.81	41931.60	5.12	.07
Residual	214	1753084.00	8191.98		
Variables in the Equation					
Variable	B	Beta	t	Significance	T
TCOMPET	4.18	.05	.55	.290	
TCUSTOM	15.67	.12	1.49	.068	
TINNO	48.73	.16	2.09	.019	

(n = 218) $p \leq .05$

H8: There will be a positive relationship between small business owners/managers'

perceived overall business success and the following components:

- a. Competitor Market Orientation
- b. Customer Market Orientation, and
- c. Business Innovation.

Small town business owners/managers' perceived overall business success was regressed on competitor market orientation, customer market orientation, and business innovation. The overall model was significant. Table 19 summarized the results of a multiple regression analysis for small business owners/managers' perceived business success.

The coefficient of determination, R^2 , were computed to examine the strength of the association between the dependent variable (SUCCESS) and the three independent variables (TCOMPET, TCUSTOM, and TINNO). The two variables, competitor market orientation and business innovation were not significantly related with small business owners/managers' business success. Meanwhile, customer market orientation had a significantly positive relationship to small town business owners/managers' perceived business success. As shown in Table 19, the R^2 value was .09, with $F = 14.34$ and $p \leq .05$; thus the three predictors account for 9% of the variance of perceived overall business success.

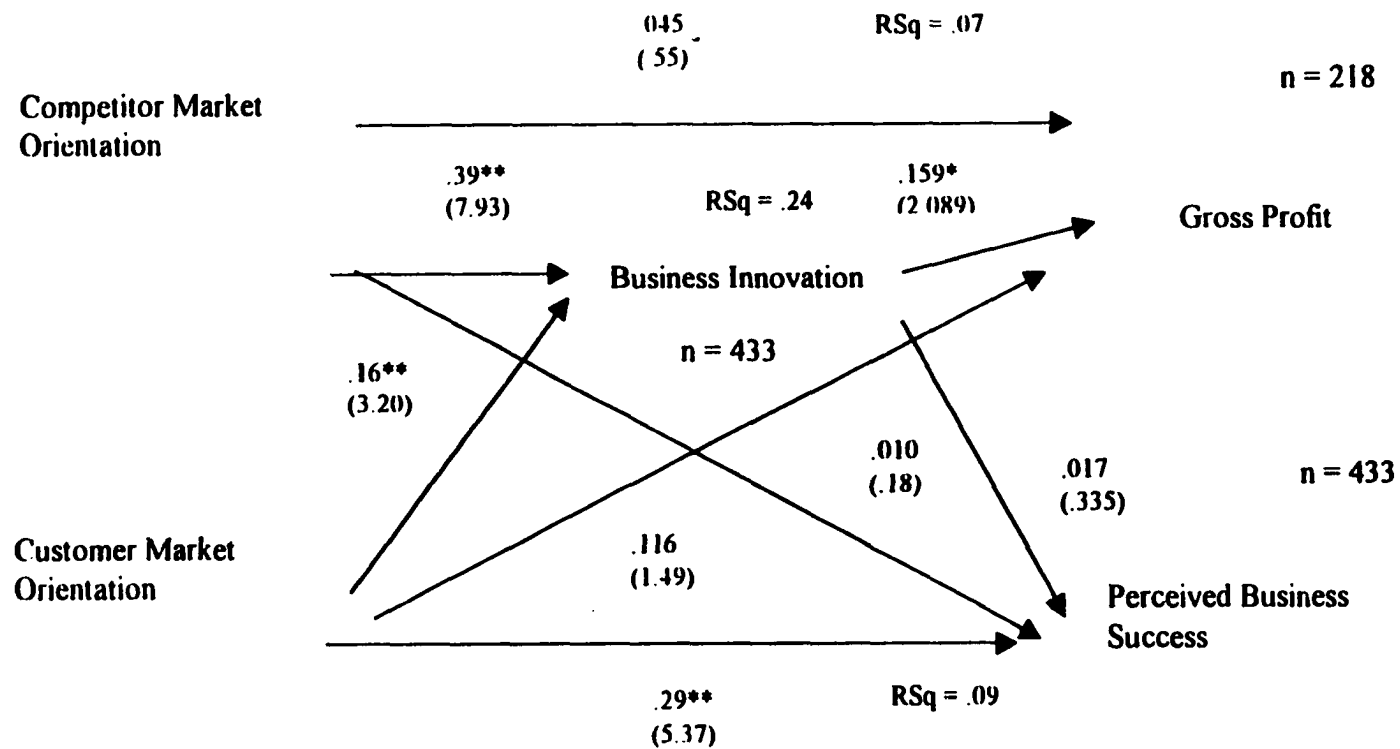
Table 19. Multiple Regression Analysis Estimating Perceived Overall Business Success for H8

	<i>df</i>	SS	MS	<i>F</i>	R^2
Regression	3	25.78	8.59	14.34	.09
Residual	429	257.11	.60		
Variables in the Equation					
Variable	B	Beta	t	Significance	T
TCOMPET	.82	.01	.18	.43	
TCUSTOM	.34	.29	5.37	< .001	
TINNO	.45	.02	.33	.37	

(N = 433) $p \leq .05$

Path Coefficients of the Model

Multiple regression analysis was performed to examine the path coefficient of the research model. Figure 2 shows a visual diagram of the paths, t -values, and R^2 values for the model. Table 20 provides a summary of the decomposition of total effects into direct and indirect effects among the variables.



Note: * $p < .05$ ** $p < .001$

Figure 2. Path Coefficient of Hypothesized Model

Table 20. Decomposition of total effects into direct & indirect effects

Response Variable	Explanatory Variable	Total Effect	Direct Effect	Indirect Effect
Business Innovation	Customer Market Orientation	.153	.153	.0000
	Competitor Market Orientation	.392	.392	.0000
Perceived Overall Business Success	Customer Market Orientation	.317	.314	.0028
	Competitor Market orientation	.019	.012	.0073
	Business Innovation	.019	.019	.0000
Gross Profit (before taxes)	Customer Market orientation	.143	.118	.025
	Competitor Market orientation	.109	.046	.0638
	Business Innovation	.163	.163	.0000

Total effect of customer market orientation on business innovation came only from the direct effect, and the total effect of competitor market orientation on business innovation also came only from the direct effect. Both customer market orientation and competitor market orientation had a direct effect on business innovation as hypothesized. Business innovation was directly influenced by customer market orientation and competitor market orientation.

Customer market orientation and competitor market orientation had both direct and indirect effects on small business owners/mangers' perceived overall business success. On the other hand, the total effect of business innovation on perceived overall business success came from its direct effect only.

Both customer and competitor market orientation had direct and indirect effects on gross profit in small town business firms. Customer market orientation had more direct effect than indirect effect on gross profit, while competitor market orientation had more indirect effect on gross profit than direct effect. Business innovation had a direct effect only on gross profit.

CHAPTER 5: DISCUSSION AND CONCLUSIONS

The final chapter discusses the findings that have been presented in chapter 4. First the demographic profiles and organizational profiles of the participating small town business owners/managers were briefly reviewed. Then, the results of simple and multiple regression pertaining to each of the eight research hypotheses that were tested in this study were examined. From these results, implications and recommendations for future research can be introduced.

Small Town Businesses' Characteristics

The present study revealed that the sample of owners and managers of small businesses in small towns is male-dominant with the majority (67.4%) of the participating small town business owners/managers male. The ages of the participants of this study were diversely distributed. Participants' ages ranged from 22 to 85, with a relatively high mean of 50 years old. This potentially can be explained with the fact that younger generations are moving to metropolitan areas for job and educational opportunities. Most of the young people tend to leave small towns to enjoy the quality of life and to obtain the economic opportunities that metropolitan areas offer (Gibbs, 1995).

The participants for the study were predominantly Caucasian (96%), showing little diversity in ethnic identity. Immigrants and minorities usually form their communities in metropolitan areas. According to Muller (1993), there are four big cities referred to "gateway cities" in which immigrants and minorities reside. The four cities are Los Angeles, Miami, New York, and San Francisco. Because big cities offer more jobs and education opportunities, immigrants and minorities tend to form their bases in these big cities with the

intention earning money and then going back to their home country (Butler & Greene, 1999). Therefore, when minorities open up their own businesses, they tend to open them in big cities where their ethnic enclaves can be their network connections. Meanwhile, minority-owned businesses seem to be rare cases in the small towns. In small communities, Caucasians dominantly operate small businesses, because small towns lack network connections and provide less opportunities and less diversity of jobs for the minorities.

Most (83.6%) of the participating small town business managers/owners were married. The majority (63.0%) of them had no children under 18 living in their household. Considering that the mean age of the participants was 50 years, the reason participants live with no children under 18 can be their children's are of the age to leave for college or to work in another area.

The results of this study indicated that, overall, the household income of the business owners/managers of the study had a relatively even distribution. The range of the household income for the participating managers/owners was from less than \$10,000 to \$90,000 or more. In terms of the household income, small town business owners/managers reported similar household incomes. It is not certain whether all the household incomes of the participating small town business owners/managers came from their small businesses or not. However, if the reported household incomes were solely from their businesses, the similarity of the household incomes of the small town business owners/managers can be explained with two reasons. First, the majority of the participants (79.7%) reported to living in communities that have less than 10,000 population. The small population indicates that many small town businesses have a limited market size. Second, the majority of the participating small business owners/managers in this study (35.3%) reported that their businesses are operated

by the owners/managers themselves with no employees. This shows that many small businesses in small towns have a similar market size, which is very small. Also, even though more than 50% of the participating business owners/managers did not report their gross profit, from the reported gross profit, small town businesses had a relatively similar gross profit.

Discussions from Hypotheses Results

Market Orientation and Business Performance

As predicted in hypotheses 1 and 2, there was a significant and positive relationship between small business owners/managers' competitor and customer market orientation and their performance in terms of gross profit (before taxes) and perceived overall business success. The finding of a positive and significant relationship between customer and competitor market orientation and financial performance was consistent with the previous studies of Narver and Slater (1990), and Pelham (2000), who found a positive effect of a market orientation on the financial performance, such as growth in sales and gross profit. According to Pelham (2000), when organizations established specific activities and behaviors designed to give attention to customers' needs and fulfill their satisfaction, the gross profit for the company increased.

The results of the study also suggested a positive relationship between two behavioral components of market orientation (customer market orientation and competitor market orientation) and small town business owners/managers' perceived overall business success. It was suggested that survival and success were distinct aspects of business performance (Kalleberg & Leicht, 1991). Those who had higher level of competitor and

customer market orientation were more likely to have a higher level of perceived business success in small towns.

Most studies on market orientation have focused on the relationship of market orientation and business performance in medium and large-sized companies. Geographically, these studies have been about businesses in big cities or metropolitan areas. Studies on market orientation in very small businesses are rare. Studies on market orientation in very small businesses in small towns are even more uncommon. Narver and Slater (1990) argued that market orientation is relevant in every market environment. Based on this idea, this study examined how small town business firms perform or employ market orientation as an organizational culture and how they deal with their customers and competitors. The results of this study showed that even in small towns, a significant relationship between customer and competitor market orientation and business profitability for the company exists. This indicates that small town businesses which had higher degree of market orientation achieved a better financial performance than those with lower degree of market orientation.

Prior studies have examined respective components of market orientation, customer market orientation, and competitor market orientation on business performance in large communities or large businesses. Based on this idea, the current study examined the respective relationship between customer market orientation and business performance and competitor market orientation and business performance. The results of this study showed that both market orientation components had a significant association with firm performance. Attention to the markets, customers, and competitors led small businesses to a superior business performance. Market-oriented activities and behaviors, such as fast response to negative customer satisfaction information, immediate response to competitors challenges,

and instant detection of changes in customer product preferences, were important determinants of business profitability (Pelham, 2000).

Survival and success have been suggested as an important indicator in measuring organization performance. To examine the effects of the competitor and customer market orientation on business performance, small business owners/managers' perceived overall business success in small towns was used as one of the indicators. The study suggested that small town business owners/managers' perceived overall business success was positively associated with both their level of competitor and customer market orientation. The current study suggests that the more market-oriented the businesses are, the higher is the small town business owners/managers' perception of business success.

Market Orientation and Innovation

There have been studies indicating that influences of market orientation on innovation are important in studying market orientation in business and organizational operation. Hurly and Hult (1998) recommended that constructs related to innovation should be incorporated into market orientation research. Atuahence-Gima (1996), Harryson (1997), and Lukas & Ferrell (2000)'s study suggested that market orientation has effects on innovation in various business firms including manufacturing and services companies. Based on these studies, this study examined the relationship between market orientation and innovation in small businesses in small towns.

Hypotheses 3, 4, and 5 were based on the assumption that there are positive relationships between small business owners/managers' competitor and customer market orientation and the degree of innovativeness. The statistical results from this study indicated

that there was a positive and significant relationship between both small town business owner/managers' competitor and customer market orientation and innovation. The study found that the small town businesses were more innovative, if they were more market-oriented. Because market orientation emphasizes a customer focus that directs firms to implement greater innovation in products and services to generate greater customer benefits, businesses with high market orientation levels were likely to possess competent capabilities to develop new products, services, or markets. Business firms need to be more innovative every day in order to survive the aggressive competition in the market place. This is especially true in today's environment where technologies are changing rapidly and competition in global markets is fierce. This situation is no different for the small town businesses. Innovation enables small businesses in small towns to enhance firm survival and avoid failure (Acs, 1999).

Innovation and Business Performance

Hypothesis 6 indicated that there would be a positive relationship between business innovation and business performance in terms of gross profit (before taxes) and small town business owners/managers' perceived overall business success. The results showed that there was a positive and significant relationship between the small town business owner's degree of innovativeness and their business performance in terms of gross profit and their perceived overall business success. The results of the multiple regression analyses for Hypothesis 7 also indicated that among the three variables, business innovation, competitor market orientation, and customer market orientation, business innovation significantly influenced the small town business firms' gross profit, while customer market orientation and competitor market orientation did not significantly affect small town businesses' gross profit with innovation in

the equation. This is consistent with some prior studies that examined product innovation at the business organizational level, such as Troy, Szymanski, and Varadarajan's (2001) study, which suggested that product innovation is essential in determining business success.

Hypothesis 8 predicted that there would be a positive relationship between small business owners/managers' perceived overall business success and the three variables, competitor market orientation, customer market orientation, and business innovation. The results indicated that customer market orientation had the most significant influence on small town business owners/managers' perceived overall business success. Most studies on market orientation have been devoted to examine the relationship between market orientation and financial performance such as gross profit and growth in sales; however, in this study two components of market orientation, customer market orientation, and competitor market orientation, were used separately to examine the relationship between market orientation and business performance.

Interestingly, the results showed that customer orientation had a positive influence on business owners/managers' perceived overall success. Even though competitor orientation did not significantly contribute to the model, customer market orientation, the core element of market orientation (Narver & Slater, 1990), had a positive and significant effect on business performance in terms of perceived business success. A strong customer-oriented culture might be an especially important base of perceived overall business success. This study indicated customer market orientation was a significant variable in explaining small business performance.

Conclusions

Small businesses are not just a smaller version of big businesses. They serve the U.S. economy with their unique and important roles. The efficient and dynamic characteristics of small businesses contribute to the U.S. economy in two major ways. First, they play a crucial role in experimentation and innovation that leads to technological change and productivity growth (Acs, 1999). Second, they are the major contributors to the growth and development of the U.S. economy creating various new products and jobs (Tosterud & Habbershon, 1992).

When it comes to small businesses in small towns, small businesses are not merely seen as having the potential to create more jobs and wealth. They are also seen as the essential mechanism of community development and local economy enhancement (Fisher & Woods, 1987). Small towns are often described as “places where everyone knows everyone else’s business” (Miller & Besser, 2000, p. 70). The familiarity and the favorable relations with other community members, such as friends, relatives, or neighbors, drive consumers in small towns to shop with local businesses to aid in their community’s development and maintenance (Choi, 1999). Small town business owners/managers, in turn, become attentive to the community and the local people’s needs and wants and try to provide the goods and services that meet those needs and wants.

Market orientation is not mentioned frequently when discussing small businesses in small towns. This can be attributed to the perception that small towns lack competitiveness because businesses are operated mostly through personal networks and familiarity among local people in small towns. Because customers have always existed for these small businesses, there was no special need for small town businesses to adopt a certain strategy to attract customers. However, even though familiarity remains as the basis for some towns’

sell and buy situation, things have started to change for many small towns. The current situation of increased competition from many big discount stores such as Walmart, outshopping in big urban and suburban shopping centers, increased competition from catalog and mail-orders, and development of e-commerce and on-line shopping is making survival difficult for small town businesses. Also, this situation has enabled many small town customers to encounter new products and services everyday. This new encounter has made customers set a higher standard in choosing products and services. These environmental changes made business owners/managers to realize that they need to come up with a new strategic business plan to avoid losing customers and survive financially. It appears that the need to focus on meeting the market demands is required for small town businesses.

Market orientation is an organizational strategy that puts the target market as the focus. By focusing on customers, market-oriented firms have implemented greater innovation in products and services offering the benefits to their customers. This, in turn, has had a huge impact on business performances. Many prior studies have examined the influence of market orientation on business performance and indicated that market orientation has a positive effect on business performances. These studies showed that market orientation works for medium-sized and large businesses in terms of better business performance. However, less is known about the influence of market orientation on business performance in small businesses in small towns. This current study examined the relationship between market orientation and business performance and verified that market orientation also enhances business performances of small businesses in small towns.

Along with market orientation, innovation was found to be an important factor in business performance in small businesses in small towns. The adoption of market orientation

led innovation for small businesses in small towns. According to Hurley and Hult's (1998) recommendation that constructs related to innovation should be incorporated into market orientation when examining business performance, this study examined the relationship among market orientation, innovation, and business performance in small businesses in small towns. The study found that Hurley and Hult (1998) were correct; organizational innovativeness is positively connected to market orientation in small town businesses. The present study suggests that when small town businesses are more market-oriented, they are also more innovative and show strong business performance.

Limitations and Implications for Future Research

Opportunities for additional research can be identified from this study. First, given the theoretical evidence that business innovation is affected by the level of market orientation, the present study found that this is also true for small businesses in rural communities. Higher levels of market orientation lead to greater business innovation in rural small businesses. From the current study, the influence of market orientation on business innovation can be extended to the rural small business larger in size than businesses with 20 employees with the annual gross sales less than \$1 million. The gap between the number of employees in small businesses between this study (less than 20) and the national statistics (less than 500) were large. Therefore, examining small businesses that are larger in size than 20 employees in rural areas may be able to provide more information on the effects of market orientation in small businesses in rural communities. Other ways to extend this study are to see the effects of market orientation in small rural businesses in all of the 50 states or to

examine and compare them by regions in the U.S. Examining the relationship among market orientation, business innovation, and business performance by the level of urbanicity can be another possibility for future research.

Second, there have been studies such as Hurley and Hult's (1998) that show a significant relationship between market orientation and organizational characteristics. Organizational characteristics can be seen as the internal matter of an organization. Organizational characteristics, such as the number of employees, gross sales, firm age, or formalization or centralization in the organizational structure or levels of hierarchy, affect market orientation in small businesses. Examining the relationship between organizational characteristics and market orientation may induce small businesses to be more market-oriented. Meanwhile, external environmental factors, such as market growth, competition intensity, and technology turbulence (Li, 1994), also can affect market orientation. Examining both the internal and external matters of small businesses may push small businesses to be more market oriented.

Third, the current study can also become the basis for examining the relationship between demographic characteristics of the small rural business owners/managers and market orientation, business innovation, and business performance. For instance, a study examining the effects of gender of the small rural business owners on the relationship among market orientation, business innovation, and business performance can be conducted with this current study as a basis. There have been some studies of women small business ownership in rural area (e.g., Tigges & Green, 1994); however, they tend to focus on the relationship between gender and business success or gender and business types.

APPENDIX A: *T*-TEST ANALYSIS

T-test Analysis of Missing and Non Missing Values for Gross Profit (before taxes)

Group 1: Participants who did not report Gross Profit

Group 2: Participants who reported Gross Profit

A. Group Statistics

	Group	N	Mean	SD
Overall Business Success	1	227	4.06	.84
	2	224	3.98	.80
Business Innovation	1	222	.61	.31
	2	219	.62	.30
Competitor Market Orientation	1	219	2.73	1.06
	2	222	2.57	1.00
Customer Market Orientation	1	221	3.99	.70
	2	222	3.89	.69

B. t-test

	t	Significance (2-tailed)	Mean Difference
Perceived Overall Business Success	1.028	.305	.08
	1.028	.304	.08
Business Innovation	-.223	.824	-.0066
	-.223	.824	-.0066
Competitor Market Orientation	1.598	.111	.1574
	1.597	.111	.1574
Customer Market Orientation	1.437	.151	.0952
	1.437	.151	.0952

- No differences were found between the two groups-

APPENDIX B: QUESTIONNAIRE

**A Study of Small Businesses
Supplementary Questionnaire**

Winter 2000

Prepared by

**Iowa State University
Statistical Laboratory
216 Snedecor Hall
Ames, Iowa**

A Study of Small Businesses
Supplementary Questionnaire for Mail Survey

For each question that follows, please circle one answer or enter one response that best represents your experiences and opinions.

A. Business Planning

Business owners/managers many engage in a variety of planning activities. For each activity listed below, please circle the number that best indicates the extent to which this is currently done in your businesses.

	Not Done at all		Done to a Very Great Extent		
1. Written long-term plans	1	2	3	4	5
2. Studying economic conditions in the market area	1	2	3	4	5
3. Determining a target growth rate	1	2	3	4	5
4. Preparing monthly budgets	1	2	3	4	5
5. Estimating cash flow	1	2	3	4	5
6. Figuring the amount of income needed to break even	1	2	3	4	5
7. Identifying sales or service trends	1	2	3	4	5
8. Identifying potential customers	1	2	3	4	5
9. Planning advertising and promotions	1	2	3	4	5
10. Reviewing customer satisfaction	1	2	3	4	5
11. Estimating the number of employees needed	1	2	3	4	5
12. Evaluating employee performance	1	2	3	4	5
13. Estimating the business's inventory needs	1	2	3	4	5
14. Keeping track of inventory	1	2	3	4	5
15. Determining the availability of merchandise	1	2	3	4	5

B. Network Strategy

1. Do you (or your business) belong to a professional network or organization relating to your type of business?

0 = No [IF NO, PLEASE GO TO SECTION C, BELOW.]

1 = Yes

2. How many years have you (or your business) been a member of this business network or organization?

_____ Years

3. How often have you used this network or organization as a resource for information or assistance?

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Very Often

C. Computer and Internet Use

1. How often are computers used in the day-to-day operations of your business?
 1 = Never → [IF COMPUTER ARE NEVER USED, PLEASE GO TO SECTION D]
 2 = Seldom 3 = Sometimes 4 = Often 5 = Very Often
2. Is the Internet (World Wide Web) used in your business?
 0 = No → [IF INTERNET IS NOT USED, PLEASE GO TO SECTION D.]
 1 = Yes
3. Do you (or your business) use the Internet for the following?

Internet Uses	No	Yes
a. e-mail	0	1
b. as a source of information	0	1
c. e-commerce (either selling or purchasing)	0	1

4. Does your business have its own Web site?
 0 = No
 1 = Yes

D. Business Finances

1. What percentage of this business did you own as of December 31, 1999? _____ %
 PLEASE ENTER "0" IF YOU DID NOT OWN ANY OF THE BUSINESS
2. During 1999, how often did your business have a cash-flow problem?
 1 = Every week 2 = Every month
 3 = Several times 4 = Once or twice
 5 = Never in 1999
3. Which of the following best describes your business's experience with financing over the past two years?
 1 = No need for outside financing
 2 = Usually able to obtain financing with desirable terms
 3 = Usually able to obtain financing on less favorable terms
 4 = Unable to obtain financing
4. Please record the following financial information for this business at this location as of December 31, 1999 or the end of your most recent fiscal year.

	<u>AMOUNT</u>
a. Total assets	\$
b. Total liabilities (debt)	\$
c. Charitable contributions	\$
d. Gross Profit (before taxes)	\$

E. Market Orientation

We are interested in how your business responds to changes in the consumer market. For each item below, please circle the number that best reflects how often the statement characterizes your business.

	Never	Seldom	Sometimes	Often	Very Often
1. How often does your managerial staff meet with customers to find out what products or services they will need in the future?	1	2	3	4	5
2. How often does your business follow-up on sales/service to provide additional service?	1	2	3	4	5
3. How often does your managerial staff discuss customers' future needs?	1	2	3	4	5
4. How often does your managerial staff discuss competitive strengths and strategies?	1	2	3	4	5
5. How often does your business intentionally take advantage of competitors' weaknesses?	1	2	3	4	5
6. How often does your business hire outside marketing consultants?	1	2	3	4	5
7. How often, when faced with decision-making situations, are you willing to take high risks?	1	2	3	4	5

For each of the following statements, please circle the appropriate number to indicate whether you agree or disagree with the statement.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8. My business is quick to detect changes in the industry, the competition, or customer preferences.	1	2	3	4	5
9. My business responds quickly to negative feedback from customers.	1	2	3	4	5
10. The marketing my business does is based primarily on our perception of customer needs.	1	2	3	4	5
11. Our competitive advantage is primarily maintained by understanding and meeting our customers' needs.	1	2	3	4	5
12. In my business, everyone works together to meet our customers' needs	1	2	3	4	5

F. Business Innovations

Businesses can be innovative in a variety of ways, such as in the development and implementation of new product/services, new methods or areas of marketing, or creative managerial techniques.

Please circle the appropriate response for each type of innovation described below.

- | 1. During the past 5 years, has your business: | <u>NO</u> | <u>YES</u> |
|---|-----------|------------|
| a. developed any new products or services? | 0 | 1 |
| b. improved the products or services it offers? | 0 | 1 |
| c. improved its methods of production? | 0 | 1 |
| d. developed new methods of marketing? | 0 | 1 |
| e. established new markets? | 0 | 1 |
| f. introduced any other types of innovation | 0 | 1 |
- If so, please explain:
-

2. Have any of your innovative products, processes or services been adopted by other businesses?

0 = No

1 = Yes

8 = No innovations introduced

3. How successful (financially or otherwise) would you say these innovations have been so far?

1 = Very Unsuccessful

2 = Unsuccessful

3 = Neither unsuccessful nor successful

4 = Successful

5 = Very Successful

8 = No innovations introduced

4. Which of the following outside sources has provided you with the greatest number of innovative ideas in the past 5 years? *[PLEASE CIRCLE ONE RESPONSE.]*

1 = Your suppliers

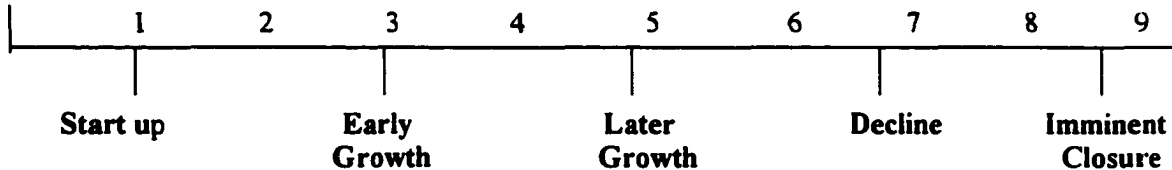
2 = Your competitors

3 = Your customers

4 = General information in your field or market

G. Business Stages

Businesses can go through different stages, beginning with the initial *Start-up* through *Growth & Development* to eventual *Decline* that can either be temporary or result in business sale or closure. Please circle the appropriate number on the continuum below that indicates most accurately the current stage of your business.

**H. Employees**

1. Overall, how would you rate the skill level of your employees?

[PLEASE CIRCLE ONE RESPONSE]

0 = Do not have any paid employees

1 = Poor

2 = Fair

3 = Good

4 = Very Good

5 = Excellent

2. Overall, how would you rate your employees' attitude toward their work?

[PLEASE CIRCLE ONE RESPONSE.]

0 = Do not have any paid employees

1 = Poor

2 = Fair

3 = Good

4 = Very Good

5 = Excellent

Thank you very much for your time and assistance.

Please fold and return the completed questionnaire in the envelope provided.

**Iowa State University
216 Snedecor Hall
Ames, Iowa 50011**

A Study of Small Businesses
Questionnaire for Telephone Interview

Int1. Hello, this is (INTERVIEWER NAME) calling for Iowa State University. May I please speak to (NAME)?

[IF NOT AVAILABLE, CLICK ON APPOINT TAB TO SCHEDULE CALLBACK]

1 = Proceed [GO TO Int 4]
2 = Right place of business but [NAME] is the wrong person

Int2. Recently we sent a letter to this business, addressed to [NAME], about a research study we are conducting with business owners and managers. We would like to talk with the person who has the most knowledge of the day-to-day management of the business. Who would that be?

[RECORD NAME]

Int3. Is (he/she) available now for me to talk with him/her?

IF NOT AVAILABLE, CLICK ON APPOINT TAB TO SCHEDULE CALLBACK.

IF YOU ARE ALREADY SPEAKING TO HIM/HER, PRESS <1> TO PROCEED.

IF HE/SHE COMES TO THE PHONE, READ: Hello, this is (INTERVIEWER NAME) calling for Iowa State University. Recently we sent a letter to this business, addressed to [NAME], about a research study we are conducting with business owners and managers, but I understand that you are the appropriate person for me to talk with. Did you receive the letter that we sent? **IF NO, VERIFY ADDRESS. READ LETTER & EXPLAIN PROJECT.**

LINDA – What is the best way for us to make any necessary address corrections?

PRESS <1> TO PROCEED

(After Int3, go to Int5.)

Int4. Recently we sent you a letter about a research study we are conducting with business owners and managers. Did you receive this letter?

[IF NO, VERIFY ADDRESS. READ LETTER AND EXPLAIN PROJECT]

- Int5. As the letter stated, we are interested in how business owners and managers operate their business and handle problems. We would like to interview you over the telephone for about 20 minutes. Is now a good time for you?

[IF NO, CLICK ON APPOINT TAB TO SCHEDULE CALLBACK.]

Before we begin, I want to assure you that all of the information you provide will be kept strictly confidential and you may refuse to answer any question that seems too personal.

1 = Proceed

Section A. BUSINESS INFORMATION

- A1. First I would like to verify some information. Do you own either all or part of [BUSINESS NAME]?

1 = Yes

0 = No

- A2a. Are you (also) the manager of the business?

1 = Yes

[GO TO QA3]

0 = No

- b. We would like to talk with the person who has the most knowledge of the day-to-day management of the business. Who would that be?

RECORD NAME

- c. Is he/she available now for me to talk with him/her?

IF NOT AVAILABLE, CLICK ON APPOINT TAB TO SCHEDULE CALLBACK.

IF HE/SHE COMES TO THE PHONE, READ: Hello, this is
(INTERVIEWER NAME) calling for Iowa State University. Recently we sent a
 letter to this business, addressed to [NAME], about a research study we are
 conducting with business owners and managers, but I understand that you are the
 appropriate person for me to talk with. Did you receive the letter that we sent?
IF NO, READ LETTER & EXPLAIN.

PRESS <1> TO PROCEED

A2d. As the letter stated, we are interested in how business owners and managers operate
 their business and handle problems. We would like to interview you over the
 telephone for about 15 to 20 minutes. Is now a good time for you?

[IF NO, CLICK ON APPOINT TAB TO SCHEDULE CALLBACK.]

Before we begin, I want to assure you that all of the information you provide will be
 kept strictly confidential and you may refuse to answer any question that seems too
 personal.

1 = Proceed

A2e. First I would like to verify some information. Do you own either all or part of
 [BUSINESS NAME]?

1 = Yes

0 = No

Record response in A1, replacing the old answer.

A2f. Are you (also) the manager of the business?

1 = Yes

2 = No

[Do we need to allow for this?]

Record response in A2a, replacing the old answer.

A3a. I would also like to verify some information relating to the size of your business. Does
 [BUSINESS NAME] have fewer than 20 full-time employees, or 20 or more full-time
 employees?

[DO NOT INCLUDE ANY OWNERS.]

1 = Fewer than 20 full-time employees

2 = 20 or more full-time employees

[GO TO CLOSE 3]

- b. Would you say that the approximate gross sales (or revenue) for [BUSINESS NAME] in 1999 were one million dollars or less, or more than one million dollars?

1 = \$ 1 million or less

2 = More than \$ 1 million [GO TO CLOSE 3]

- A4. We are interested in the type of business that you are involved in. What kind of business is [BUSINESS NAME]?

PROBE: WHAT DOES THE BUSINESS MAKE OR WHAT SERVICE DOES IT PROVIDE?

- A5. Is this business based in or from your home?

1 = Yes

0 = No

- A6. Do you consider [BUSINESS NAME] to be a family business?

1 = Yes

0 = No

- A7. In what year did [BUSINESS NAME] begin operating in [FILL TOWN]?

ENTER 4-DIGIT YEAR

- A8. We are interested in the size of the community that your business is located in. Would you say that the population of [FILL TOWN] is...

1 = less than

2 = from up to

3 = from up to

4 = from up to , or

5 = or more?

- A9. [FILL "Do you" or "Does the owner of the business (or any of the owners)"] live in the community that the business is located in?

1 = Yes

0 = No

IF MANAGER ONLY (QA1a = 0), GO TO QA12

A10a. Did you start the business, inherit the business, or purchase the business?

1 = Start [GO TO A12]

2 = Inherit [GO TO A11]

3 = Purchase

(If married into the business or other unusual situation, make remark to explain, enter DK here, and go to A11.)

b. Did you purchase it from a relative or from someone else?

1 = Relative

2 = Someone else

IF QA10a = 2 OR 3, ASK:

A11. Did you work in the business as an employee first, before you [FILL WITH INHERITED or PURCHASED] it?

1 = Yes

0 = No

A12. How knowledgeable were you about this field of work before you [FILL WITH STARTED/INHERITED/PURCHASED/BECAME AN OWNER OF] this business? On a scale of 1 to 5, where 1 means not knowledgeable at all and 5 means very knowledgeable, which number would you choose?

Not at All

1

2

3

4

Very Knowledgeable

5

A13. How many years have you (FILL OWNED/MANAGED) this business?

ENTER NUBMER OFYEARS

A14a. How many weeks a year do you usually work at this business?

ENTER 1- 52

A14b. How many hours per week do you usually work at this business? (when you are working)

ENTER 1 – 90

**A15. You mentioned earlier that [BUSINESS NAME] has fewer than 20 full-time employees. Not including any owners, how many total employees work for [BUSINESS NAME], including both full-time and part-time?
MAY INCLUDE TEMPORARY/SEASONAL.**

[IF 0 EMPLOYEES, GO TO QA17.]

A16. How many of these employees are related to [FILL YOU or THE OWNER]?

ENTER NUMBER

A17. To help us further understand the size of your business what were the approximate gross sales (or revenue) for [BUSINESS NAME] in 1999?

ENTER SALES IN DOLLARS

A18. Next, we would like a little information about the customers you serve. Approximately what percentage of all of your customers comes from outside your local community?

ENTER PERCENT

A19a. For the purposes of this study, customers are divided into three groups: some may be private individuals, some may be government agencies or public institutions, and some of your customers may be other businesses.

Approximately what percentage of your business revenue would you say comes from private individuals?

ENTER PERCENT

[IF A19a = 100%, GO TO A19b. OTHERWISE, GO TO A19c.]

- b. Would you say, then, that none of your customers are government agencies, public institutions or other businesses?

IF ALL CUSTOMERS ARE PRIVATE INDIVIDUALS, PRESS <1> TO PROCEED.
(Put 0 in A19c & A19e and go to Section B.)

IF NECESSAR, BACK UP TO CHANGE PREVIOUS ANSWER.

- c. Approximately what percentage of your business revenue would you say come from **government agencies or public institutions?**

ENTER PERCENT

[IF A19a + c = 100%, GO TO A19d. OTHERWISE, GO TO A19e.]

- d. Would you say, then, that none of your customers are other businesses?

IF NO CUSTOMERS ARE OTHER BUSINESSES, PRESS <1>TO PROCEED.
(Put 0 in A19e and go to Section B.)

IF NECESSARY, BACK UP TO CHANGE PREVIOUS ANSWER(S).

- e. Approximately what percent of your business revenue would you say comes from **other businesses?**

ENTER PERCENT

[CHECK IF Q19a + c + e = 100. "I'm sorry. These three don't add up to 100%. How should I adjust this?"]

SECTION B. SUCCESS, STRATEGIES, GOALS

B1. How satisfied are you with the type of work you do? Are you very dissatisfied, Dissatisfied, neutral, satisfied, or very satisfied (with the type of work you do)?

- 1 = Very Dissatisfied
- 2 = Dissatisfied
- 3 = Neutral
- 4 = Satisfied
- 5 = Very Satisfied

B2. In the next 5 years, do you expect your business to expand, stay the same, or reduce in size?

- 1 = Expand
- 2 = Same
- 3 = Reduce

B3. In your opinion, which one of the following is the most important long-range goal for you in this business? READ OPTIONS.

- 1 = To make a profit,
- 2 = to have a positive reputation with customers,
- 3 = to achieve a sense of personal accomplishments,
- 4 = to have the business grow or expand, or
- 5 = to provide a valuable service to the community?
- 6 = OTHER (Specify: _____)

B4: How successful do you feel you (and your business) have been in achieving this goal so far? On a scale of 1 to 5, where 1 is not at all successful and 5 is very successful, what number would you choose?

Not at all
successful

Very
successful

1

2

3

4

5

B5. Next, think about the products or services that your company provides. I will read a list of business strategies relating to products or services, and for each one, please tell me how important it is to the success of your business by using the scale from 1 to 5. This time the 1 means Not Important at All and 5 means Very Important. Here's the first one.

How important to the success of your business is (ITEM)? Which number from 1 to 5 would you choose?

Business Strategies	Not Imp at All				Very Imp
a. offering quality products or services?	1	2	3	4	5
b. offering low-cost products or services?	1	2	3	4	5
c. offering customized products or services?	1	2	3	4	5
d. specializing in a narrow range of products or services?	1	2	3	4	5
e. offering a wide variety of products or services?	1	2	3	4	5
f. offering cutting-edge, innovative products or services?	1	2	3	4	5

- B6.** The next business strategies relate to your business and the community it is located in. Using the same scale of 1 to 5, how important is it for your business to [ITEM]?

Business Strategies		Not Imp at All				Very Imp
a.	maintain a good business image in your your community?	1	2	3	4	5
b.	strengthen the local community?	1	2	3	4	5
c.	cooperate with other local businesses?	1	2	3	4	5
d.	exchange information with businesses outside your community?	1	2	3	4	5

- B7.** These last strategies relate to business operations. Still using the scale of 1 to 5, how important to the success of your business is ...

(If not applicable, e.g., no employees, that is a 1 – Not important at all.)

Business Strategies		Not Imp at All				Very Imp
a.	training your employees?	1	2	3	4	5
b.	using new technology?	1	2	3	4	5
c.	obtaining advice from paid consultants?	1	2	3	4	5
d.	developing your own professional skills as a business manager?	1	2	3	4	5

- B8.** Overall, how successful is your business (as a whole)? Using the scale of 1 to 5, where 1 is not at all successful and 5 is very successful, what number would you choose?

Not at all successful						Very successful
1	2	3	4	5		

Section C. PROBLEMS

Next, I'm going to read a list of problems many businesses face. Please rate each of these problems for your business.

Currently, how much of a problem (is/are) [ITEM] (for your business)? Would you say it is a severe problem, a major problem, a moderate problem, a minor problem, or not a problem at all?

	Problem	Severe Problem	Major	Moderate	Minor	Not a Problem
1.	The location of your business	1	2	3	4	5
2.	Meeting customer needs	1	2	3	4	5
3.	Developing marketing strategies	1	2	3	4	5
4.	Pricing products or services	1	2	3	4	5
5.	Finding or retaining qualified personnel	1	2	3	4	5
6.	Labor costs	1	2	3	4	5
7.	Overhead expenses, not including labor costs	1	2	3	4	5
8.	Competition from other businesses	1	2	3	4	5
9.	Government regulations and laws	1	2	3	4	5
10.	The availability of financing at reasonable rates	1	2	3	4	5

Section D BUSINESS COMMUNITY

Now, I'd like to ask you some questions about you and the community your business is located in.

D1. About what proportion of the adults living in [CITY] do you know by name? Would you say ...

- 1 = none or very few,
- 2 = less than half,
- 3 = about half,
- 4 = more than half, or
- 5 = almost all of them?

D2. About what proportion of your close personal friends live in [CITY]? Would you say

- 1 = none or very few,
- 2 = less than half,
- 3 = about half,
- 4 = more than half, or
- 5 = almost all or all of them?

D3. In general, how **friendly** are the people who live in [CITY]? On a scale of 1 to 5, where 1 means not friendly at all and 5 means very friendly, what number would you choose?

Not Friendly
at All

Very
Friendly

1 2 3 4 5

D4. In general, how **trustworthy** are the people who live in [CITY]? If 1 means not trustworthy at all and 5 means very trustworthy, what number would you choose?

Not
Trustworthy
At all

Very
Trustworthy

1 2 3 4 5

D5. In general, to what extent do you **feel at home** in [CITY]? If 1 means you do not feel at home at all and 5 means you feel very much at home, what number would you choose?

Not at Home
at all

Very much
at Home

1 2 3 4 5

D6. We are interested in your opinions about the community in which your business operates. I will read you a list of statements, and please tell me whether you strongly disagree, disagree, agree, or strongly agree with each statement.

Here's the first one.

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. The people of [CITY] really care about the fate of this business.	1	2	3	4	5
b. This business does not have much to gain by remaining in [CITY].	1	2	3	4	5
c. If given a chance, I would brag about [CITY] as a good place to locate a business.	1	2	3	4	5
d. As a business owner/manager, I am willing to expend resources to help this town.	1	2	3	4	5
e. If I feel like just talking, I usually can find someone in the community to talk with.	1	2	3	4	5
f. When something needs to get done in [CITY], the whole community usually gets behind it.	1	2	3	4	5
g. The failure of people to work together is a severe threat to the community.	1	2	3	4	5

- D7.** Next we would like to know you have been involved in the community affairs of [CITY] since you became the (owner/manager) of your business.

Since you became the (owner/manager) of your business, have you held an **elected or appointed** community office? (including positions on the city council, zoning commission, ad hoc committees, etc.)

1 = Yes

0 = No

- D8.** Since you became the owner/manager of your business, have you served a leadership position in a civic organization or other local organization? (This would include groups such as the PTA, Rotary, Chamber of Commerce, etc.)

1 = Yes

0 = No

- D9.** The following items are ways that businesses can support the community on a voluntary basis. We would like to know if your business has provided the following kinds of community support during the past 5 years.

[READ ITEM] Would you say never, seldom, sometimes, often, or very often?

How often in the past 5 years has your business provided...		Never	Seldom	Sometimes	Often	Very Often
a)	financial or technical assistance in community development and planning?	1	2	3	4	5
b)	donations to local schools or youth programs?	1	2	3	4	5
c)	support for local bond issues to finance community development projects?	1	2	3	4	5

D10. How satisfied are you with the amount of support your business gets from your community? Would you say you are...

1 = very dissatisfied,

2 = dissatisfied,

3 = neutral,

4 = satisfied, or

**5 = very satisfied with the support your business
gets from your community?**

Section E. DEMOGRAPHICS

Finally, we have some questions about you and your household.

E1. CODE OR ASK IF UNSURE: Are you ...

- 1 = male, or
- 2 = female?

E2. How would you rate your overall health? Would you say it is ...

- 1 = poor,
- 2 = fair,
- 3 = good,
- 4 = very good, or
- 5 = excellent?

E3. How old were you on your last birthday?

_____ Years

E4. In what city and state do you live?

MAY DELETE THIS ITEM

_____ Town

_____ State

E5. How long have you lived there?

ENTER NUMBER OF YEARS

0 = Less than a year

E6. What is the highest level of schooling you have completed?

- 1 = Less than High School
- 2 = High School Graduate
- 3 = Vocational/Technical School
- 4 = Some college
- 5 = Bachelors Degree
- 6 = Advanced degree (Master's, Ph.D., etc.)

E7a. Do you consider yourself ...

- 1 = white,
- 2 = African-American,
- 3 = Asian or Pacific Islander,
- 4 = Native American, Aleut or Eskimo, or
- 5 = something else? *Specify:* _____

b. Are you Hispanic?

- 1 = Yes
- 0 = No

E8. What is your current marital status? Are you ...

- 1 = married,
- 2 = living as married, [GO TO QE10]
- 3 = divorced, [GO TO QE10]
- 4 = separated, [GO TO QE10]
- 5 = widowed, or [GO TO QE10]
- 6 = single and never married? [GO TO QE10]

E9. What is your spouse's current employment situation? Is (he/she)...

- 1 = employed full-time *(includes self-employed)*
- 2 = employed part-time *(includes self-employed)*
- 3 = retired,
- 4 = a full-time student,
- 5 = a full-time homemaker, or
- 6 = unemployed?

E10. How many people living in your household are less than 18 years old?

_____ # under age 18

E11a. Next please think about your total household income last year, in 1999. This would include income before taxes from all sources, such as employment, social security, investments and interest for all members of your household. Was your 1999 household income ...

- 1 = less than \$50,000 or [GO TO E11b]
- 2 = \$50,000 or more? [GO TO E11c]

E11b. Would you say it was ...

- 1 = less than \$10,000,
- 2 = from \$10,000 up to \$20,000,
- 3 = from \$20,000 up to \$30,000,
- 4 = from \$30,000 up to \$40,000,
- 5 = from \$40,000 up to \$50,000?

E11c. Would you say it was ...

- 1 = from \$50,000 up to \$60,000,
- 2 = from \$60,000 up to \$70,000,
- 3 = from \$70,000 up to \$80,000,
- 4 = from \$80,000 up to \$90,000, or
- 5 = \$90,000 or more?

E12. Those are all the questions we have for you today. There is some additional information we would like to gather; but, in order to make the best use of your time, we would like to send a questionnaire to you in the mail that you could complete at your convenience. It would take about 15 minutes or so.

- 1 = PROCEED [GO TO VERIFY]
- 0 = REFUSES [GO TO E13]

E13. Would you like a copy of the results of the study when it is completed? (It could be up to a year before results will be available.)

- 1 = Yes
- 0 = No [IF NO TO BOTH E12 & E13, GO TO CLOSE2.]

VERIFY: I just want to verify your name and the correct mailing address. Our records show
(READ NAME & ADDRESS, CHECK SPELLING.
MAKE ANY NECESSARY CORRECTIONS.)

RESPONDENT'S NAME:
BUSINEE NAME:
MAILING ADDRESS:

IF NO TO E12 & YES TO E13, GO TO CLOSE 2.

IF YEST TO E12: Would you like a copy of the results of the study when it is completed?
(It could be up to a year before results will be available.)

- 1 = Yes
- 0 = No

CLOSE1:

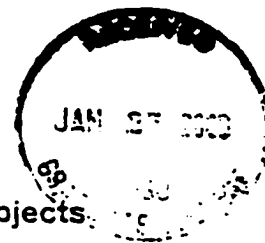
Thank you very much for your time (today/this evening). We will send this questionnaire to you within the next week or so, and we'll look forward to hearing back from you. Have a good (day/evening). **END CALL.**

IF NO TO BOTH E12 & E13:

CLOSE 2: We do appreciate the time you took to talk with us (today/this evening). Iowa State University thanks you very much. **END CALL.**

CLOSE3: For the purposes of this study, the researchers are focusing on the experiences of small businesses (with fewer than 20 full-time employees and gross sales of less than \$1 million.) Your business is a larger one, and so we do not need to ask you any further questions. Iowa State University thanks you for your time and cooperation today.

APPENDIX C: HUMAN SUBJECTS REVIEW



Information for Review of Research Involving Human Subjects

Iowa State University

(Please type and use the attached instructions for completing this form)

1. Title of Project The Small Business Study
2. I agree to provide the proper surveillance of this project to insure that the rights and welfare of the human subjects are protected. I will report any adverse reactions to the committee. Additions to or changes in research procedures after the project has been approved will be submitted to the committee for review. I agree to request renewal of approval for any project continuing more than one year.

Sarah M. Nusser
Typed name of principal investigator

1/25/2000
Date

Sarah M. Nusser
Signature of principal investigator

Statistics
Department

216 Snedecor Hall
Campus address

Dianne 4-9753
Phone number to report results

3. Signatures of other investigators

Date

Relationship to principal investigator

Nancy J. Miller

1/25/2000

Asst. Professor, Family & Consumer Sciences

Dianne G. Anderson

1/25/2000

Project Manager, Stat Lab

4. Principal investigator(s) (check all that apply)

☒ Faculty ☒ Staff ☐ Graduate student ☐ Undergraduate student

5. Project (check all that apply)

☒ Research ☐ Thesis or dissertation ☐ Class project ☐ Independent Study (490, 590, Honors project)

6. Number of subjects (complete all that apply)

adults, non-students: 1000 # minors under 14: _____ # minors 14 - 17: _____

ISU students: _____ other (explain): _____

7. Brief description of proposed research involving human subjects: (See instructions, item 7. Use an additional page if needed.)

A twenty minute telephone interview will be conducted with managers of selected businesses across the U.S. This phone interview will be followed by a second mail questionnaire. The information gathered will be used to assess the viability and concern of small business nationwide. Subjects will be asked questions from the attached questionnaires. Respondents will not receive any incentive for participation.

(Please do not send research, thesis, or dissertation proposals.)

8. Informed Consent: ☐ Signed informed consent will be obtained. (Attach a copy of your form.)
☒ Modified informed consent will be obtained. (See instructions, item 8.)
☐ Not applicable to this project.

9. Confidentiality of Data: Describe below the methods you will use to ensure the confidentiality of data obtained. (See instructions, item 9.)

No names, addresses, or telephone numbers appear on the questionnaire. No names will be released to any individual or organization not associated with the project. The sample list will be destroyed approximately one year after the completion of the study.

10. What risks or discomfort will be part of the study? Will subjects in the research be placed at risk or incur discomfort? Describe any risks to the subjects and precautions that will be taken to minimize them. (The concept of risk goes beyond physical risk and includes risks to subjects' dignity and self-respect as well as psychological or emotional risk. See instructions, item 10.)

No know risks

11. CHECK ALL of the following that apply to your research: NONE

- ☐ A. Medical clearance necessary before subjects can participate
☐ B. Administration of substances (foods, drugs, etc.) to subjects
☐ C. Physical exercise or conditioning for subjects
☐ D. Samples (blood, tissue, etc.) from subjects
☐ E. Administration of infectious agents or recombinant DNA
☐ F. Deception of subjects
☐ G. Subjects under 14 years of age and/or ☐ Subjects 14 - 17 years of age
☐ H. Subjects in institutions (nursing homes, prisons, etc.)
☐ I. Research must be approved by another institution or agency (Attach letters of approval)

If you checked any of the items in 11, please complete the following in the space below (include any attachments):

Items A-E Describe the procedures and note the proposed safety precautions.

Items D-E The principal investigator should send a copy of this form to Environmental Health and Safety, 118 Agronomy Lab for review.

Item F Describe how subjects will be deceived; justify the deception; indicate the debriefing procedure, including the timing and information to be presented to subjects.

Item G For subjects under the age of 14, indicate how informed consent will be obtained from parents or legally authorized representatives as well as from subjects.

Items H-I Specify the agency or institution that must approve the project. If subjects in any outside agency or institution are involved, approval must be obtained prior to beginning the research, and the letter of approval should be filed.

Last name of Principal Investigator NUSSER

Checklist for Attachments and Time Schedule

The following are attached (please check):

12. ☒ Letter or written statement to subjects indicating clearly:
- a) the purpose of the research
 - b) the use of any identifier codes (names, #'s), how they will be used, and when they will be removed (see item 17)
 - c) an estimate of time needed for participation in the research
 - d) if applicable, the location of the research activity
 - e) how you will ensure confidentiality
 - f) in a longitudinal study, when and how you will contact subjects later
 - g) that participation is voluntary; nonparticipation will not affect evaluations of the subject
13. ☐ Signed consent form (if applicable)
14. ☐ Letter of approval for research from cooperating organizations or institutions (if applicable)
15. ☒ Data-gathering instruments

16. Anticipated dates for contact with subjects:

First contact

February 3, 2000

Month/Day/Year

Last contact

April 30, 2000

Month/Day/Year

17. If applicable: anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual tapes will be erased:

February 1, 2001

Month/Day/Year

18. Signature of Departmental Executive Officer Date

Dean L. Isaacson by Edith C. Landis 2/25/2000

Department or Administrative Unit

Department of Statistics

19. Decision of the University Human Subjects Review Committee:

☒ Project approved☐ Project not approved☐ No action required

Name of Human Subjects in Research Committee Chair

Patricia M. Keith

Date

1/20/2000

Signature of Committee Chair

PM Keith

Letter sent to name and business identified in the sample prior to telephone contact.

January 24, 2000

FirstName LastName
Business Name
Business Address
City, State Zip

Dear «Prefix» «LastName»:

Iowa State University is conducting a nation-wide research study with business owners and managers to learn more about the ways in which they manage their business and handle problems.

Within the next few weeks, one of our research interviewers will call you to conduct a telephone interview that will take about 20 minutes to complete. You will be asked questions relating to the nature and organization of your business as well as methods of business management. After the interview is completed, we would like to send you a brief questionnaire in the mail with a few additional questions. This can be completed and returned to us at your convenience.

Although your participation in this study is voluntary, your cooperation is most important. You represent thousands of other privately-owned businesses, and it is very important that we include your opinions and experiences. Any information you provide will be kept confidential and the answers you provide will be combined with those of others who take part in this research.

In appreciation for your time and effort, we will provide interested project participants with feedback on the results of the research that we hope will be both informative and helpful. Thank you very much for your cooperation. If you have any questions, please feel free to contact Dianne Anderson, the project manager, during regular central time business hours at 1 800 294-4852.

Sincerely,

Nancy J. Miller, Assistant Professor
Iowa State University

Letter sent to respondents who completed the telephone questionnaire.

January 24, 2000

FirstName LastName
Business Name
Business Address
City, State Zip

Dear «Prefix» «LastName»:

Recently you participated in a telephone interview that was part of a research project being conducted by Iowa State University. We greatly appreciate the time that you took to assist us in this important project and look forward to your continued participation in this last phase of the research.

As our interviewer mentioned on the telephone, we are enclosing a questionnaire that will take about 15 minutes to complete. The information that you have already graciously provided is most useful when it is complemented by the information in this questionnaire. Although your participation is voluntary, please make the best use of the time and knowledge that you have already invested in this project by completing the enclosed questionnaire and returning it to the Iowa State University Statistical Laboratory at your earliest convenience. As before, all information is kept completely confidential and is reported in summary form only.

Reports on the results of this study will be sent to interested project participants within the next year or two. I hope you will find them to be both informative and helpful.

Thank you once again for your cooperation. We look forward to receiving your completed questionnaire. If you have any questions, please contact Dianne Anderson, the project manager at 1-800-294-4582.

Sincerely,

Nancy J. Miller, Assistant Professor
Iowa State University

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